

ESTABLISHED 1859.

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### OUR WINTER ISSUE.

THE number which we shall publish on January 27 will be quite an exceptional one. From the practical and business points of view it will be thoroughly good, and from that standpoint alone it will be a number that subscribers will preserve. A man whom all Englishmen know once said 'It's the seasonin' as does it"; and we hope to throw in a good dash of that element into the winter number—in fact we have obtained from one of the most popular writers of the

## AN AMUSING AND THRILLING SKETCH,

which includes what the author calls "a hair-raising lecture" by a professor of chemistry. Besides this the issue will be illustrated by a beautiful process which has not been applied before to a weekly journal. On the advertising side we expect that the issue will also surpass its predecessors, but this is a matter which advertisers have in their own hands. We remind them that

## THE CIRCULATION WILL BE 11,000

—that is, to eleven thousand men in the drug business at home and abroad. The publisher will receive price-lists and circulars for insertion in the issue, but arrangements for these must be made promptly, as we close this section on January 22. To secure good positions for these and other advertisements immediate application is necessary.

## POSTCARD COMPETITIONS.

We shall be glad to recommence our series of Postcard Competitions again this year, but we hope, if these are interesting to the trade, that we shall get good responses. We shall always give a guinea as a prize, and where circumstances justify it we shall with pleasure exceed that amount. But in order to keep the thing lively a good number must join in the sport. It is not much trouble to fill a postcard; replies must be sent on these, and subscribers, their assistants, and members of their families are all eligible to compete.

For our first competition this year we invite replies to the following question:—

WHAT SIX ARTICLES IN YOUR STOCK ARE MOST FREQUENTLY ASKED FOR?

We do not wish the replies to be limited to any particular branch of trade. Let the articles be drugs, chemicals, drysalteries, galenical preparations, perfumery, sundries, postage-stamps—anything, in fact, that you sell in your shop Postcards will be eligible up to the end of January.

## Summary.

A LINCOLN herbalist has answered to his ninth summons for Sunday trading.

CHEMISTS of Birmingham, Brighton, London and Manchester will worship Terpsichore, next week.

THE house of Kent, of brush-fame have celebrated the advent of the fifth generation of sons into the world.

BROMIDIA has been the cause of a death in a London hospital. A nurse gave ziss. of it to a patient instead of ziss.

THE Sheffield Corporation are to prosecute three retailers of ground ginger, which Mr. Allen, the analyst, found to contain "spent ginger."

WE print the questions set at the Preliminary examination on Tuesday, also the names of those who have passed the Major and Minor in London.

A CORRESPONDENT appeals to dispensers for an expression of opinion as to the legitimacy of the use of miscible extracts in place of B.P. fluid extracts.

THE Home Secretary has issued new rules regarding the control of chemical pursuits. These chiefly apply to the alkali industry, but some parts of the wholesale drug-trade may be affected by them.

THE Manchester Pharmaceutical Association on Wednesday evening condemned the practice of a chemist who issues circulars regarding specific complaints, in which he says his medicines are made according to the prescriptions of certain medical men.

THERE have been some interesting proceedings at Dundee in regard to Tyson's "Cure" for drunkenness. The chairman of a committee of investigation resigned his office in consequence of a report regarding the "cure" which appeared in The Chemist and Druggist of Australasia.

MADAME RUPPERT, the skin-specialist, having sued one of her agents for the price of cosmetics supplied, the defendant contended that as the preparation was a poisonons one she could not legally sell it, therefore that the contract was void. Judge Lumley Smith upheld this view so far as the poisonous preparation was concerned.

THE Pharmaceutical Council at its meeting on Wednesday transacted routine business mainly. The Council expressed by resolution its sense of the life-work of the late Professor Bentley, and Mr. Atkins made a strong appeal for immediate and general support of the Benevolent Fund, the balance in hand having run low down. Two annuitants resigned their annuities owing to improved circumstances.

THE Pharmaceutical Council of Ireland sheld its meeting last week. The report of Dr. Duffey on the examinations was received. In this (which was addressed to the Lord Lieutenant) the action of the examiners in passing a few weak Preliminary candidates was condemned. Dr. Duffey approved of the proposed extension of the curriculum, and highly praises the society's new examination-rooms.

THE Pharmaceutical Society of Ireland has again instituted a prosecution in respect to the sale of Ruppert's skinlotion. Evidence for the prosecution showed that the lotion contained corrosive sublimate, but for the defence there was evidence to show that the lotion as sent out by the maker no longer contains that poison, and that if a mistake had been made by an assistant the defendant was not responsible. Judgment was reserved.

## English Rews.

The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

#### The Sale of Carbolic Acid.

At a meeting of the North London Committee of the Metropolitan Grocers' and Provision Dealers' Association last week, a resolution expressing an 'carnest hope that the Privy Council will not accede to the request of the Pharmaceutical Society to place carbolic acid in the schedule of the Pharmacy Act, as such a step would be an injustice to the oilmen and others who sell carbolic acid and its preparations" was carried.

### Carbolic acid Polsoning.

James George, a Bristol labourer, aged 55, who had been drinking heavily, finished up with a draught of carbolic acid, from which he died while he was being carried to the infirmary.

The Middlesborough Coroner held an inquest on January 4 on the body of Robert Johnson, tobacconist, aged 54, who had died the previous night from the effects of a dose of carbolic acid. Deceased had sustained an accident to his foot about ten weeks ago, and, having since been out of employment, became at times greatly dejected.

### Sunday Trading.

Walter Fletcher, herballst, Waterside, Lincoln, and two other shopkeepers were summoned at the Lincoln Police Court on January 4, for Sunday trading on December 24. Police Constable Young, in reply to the defendant, denied that he saw about forty persons murch up to his shop on the morning in question. The defendant said this was his ninth appearance for Sunday trading. He had had an interview with the Watch Committee, but, strange to say, although they gave him a hearing the reporters and others were asked to withdraw. He did not know whether it was the wormwood and the gall or the bitter pills that were sold in Waterside that they did not like. The defendant was about to bring the attention of the Bench to comments on the case made in the Sunday Chronicle and Trut', when he was interrupted by the Chairman, who said he thought the Magistrates had heard sufficient, and they had made up their minds what to do. The defendant had set the law at defiance, and the Watch Committee we determined to stop Sunday trading. The Chairman further said that in his young days shops were open until past 10 P.M. every day of the week, but people were none the better for it. All the defendant had to do was to put a notice in his shop-window stating his shop would be closed on Sundays, and he would then find that people would make their purchases on Saturday nights, and the defendant would be none the worse off. The defendant replied that he was obliged to the Chairman for his advice, but it differed to the opinions held by him. He was certain that all the Magistrates were not against him, neither were all the Town Council and the Watch Committee. He had friends amongst them all, and the Watch Committee were as sick of the whole thing as everyone else. The Magistrates, in fining defendant 5s., informed him that if he was again summoned he would be also mulcted in costs amounting to 15s. The defendant said that according to the Act of Parliament no costs could be added, but the Magistrates' Clerk informed him that he was

### Sheffield Analyst's Report.

The Public Analyst for Sheffield (Mr. Alfred H. Allen), in his quarterly report to the City Council as to the operation of the Food and Drugs Act, states that during the three months he has analysed 104 samples. Nine samples each of flour and mustard were found to be genuine. Of nine samples of coffee five were genuine; others were adulterated with chicory in proportions estimated at 40, 50, 70, and 70 per cent. respectively. Of ten samples of ground ginger six were of fair quality and one of very suspicious character,

while three contained admixtures of previously exhausted ginger in proportions estimated respectively at 30, 30, and 40 per cent. The use of exhausted ginger as an adulterant of ground ginger is a practice well known to exist, but means of detecting the sophistication have only recently been devised. The Corporation have resolved to prosecute with regard to three cases of ginger and two of coffee. The rest of the report deals with milk and butter.

## Bromidia Figures at an Inquest.

Dr. Westcott held an inquiry at the North Kensington Infirmary on Saturday concerning the death of William Hastlett. aged 66, formerly a stonemason. Dr. John R. Lunn, the medical superintendent, stated that the man was admitted on November 17 last year, suffering from spinal paralysis, softening of the brain, and kidney-disease. Witness prescribed  $1\frac{1}{2}$  dr. of bromidia, a sedative medicine. He afterwards found him in a sleepy, comatose condition, and learned that the nurse had made a mistake and given him  $1\frac{1}{2}$  oz. of the mixture. He died on Thursday. The patients were generally given  $1\frac{1}{2}$ -oz. doses of medicine, and a dose of  $1\frac{1}{2}$  dr. was very rare. Clara Uridge, the head nurse, deposed that it was her duty to give the patients medicine, which was usually in  $1\frac{1}{2}$ -oz. doses. On Thursday night she gave the man  $1\frac{1}{2}$  oz. of his medicine, and the next morning heard she had made a mistake. Dr. J. Lunn said that death was due to "an over-dose of bromide of chloral." The jury returned a verdict of accidental death.

### Chemists as Witnesses.

At St. Helens County Court, last week, before Judge Shand, Mr. Frodsham, solicitor, appealed against the County Court Registrar's taxation of costs in the case of James Hill, Denton's Green, and Lloyd Lewis, heard a week or two ago, in which Hill claimed 25s., the price of a dog bought from Lewis, and which did not come up to his expectations. A verdict was given for the defendant, with costs, and Mr. Frodsham now complained that 10s. had been put down for a witness named Pickering, a chemist, 5s. for a labourer named Worsley, and 6s. for a leadworks employé named Spash. He contended that the amounts were too large.

His Honour considered the allowances very reasonable, and added that the chemist was really entitled to a guinea. He

declined to grant the application.

## Poisoned with Vitriol.

Mr. Sidney Atkins, relieving officer and registrar for Beckenham and West Wickham, has met with a fearful death. On returning home after a Christmas party, he took what he believed to be ale from a jar, and drank some of it before he discovered that it was impure vitriol. He lingered for a week in terrible suffering and then died. The throat, gullet, and stomach, the doctors said, had been entirely denuded of their natural surface by the acid, and were in a fearful condition.

## Liquid Air.

Professor James Dewar has concluded, at the Royal Institution, a course of six lectures on this subject, during which he has explained the marvellous phenomena already recorded in his more advanced lectures. In answer to an inquiry, he stated on Tuesday that liquid air is continually boiling and passing away into gaseons air at a temperature of 190° below freezing point on the Contigrade scale, or, in other words, at about 350° of frost calculated on the popular Fahrenheit scale, but the air can be kept in its liquid state from thirty to forty hours if the proper precautions are taken. A curious experiment was performed to show that even alcohol, that most unfreezable of liquids, yields to the enormous cold of liquid oxygen. Some alcohol poured on the surface became converted into a little block of ice, which for the time being lost its power to burn. When taken out it gradually melted into a kind of treacly mass and finally resumed its liquid form.

## Medicines for Specific Complaints.

At a meeting of the Manchester Pharmaceutical Association on Wednesday night, Mr. G. S. Woolley presiding, Mr. William Kirkby stated that he had received a circular from a firm of registered chemists which offered for sale at 1s. per

bottle medicines for various specific ailments, which medicines were said to have been prepared in accordance with the prescriptions of various emirent medical men, whose names were given in handbill. He expressed the opinion that the Council of the Pharmaceutical Society should express disapproval of such proceedings, which was a reflection on the entire body of chemists. Other members concurred, declaring that the proceeding complained of was a gross breach of confidence, and that medical men of the district ought to take action.

#### The Harness Prosecution.

The evidence for the prosecution in this case was closed on Wednesday, and Mr. Avory commenced his address for the defence. It was a clever address, and in the course of it Mr. Avory contrasted allopathy and homeopathy, pointing out how ridiculous it would now appear if followers of the latter cult had been prosecuted by the former in days gone by. He submitted that the Harness treatment was rational, though new. It could not alter the case whether the difference between the cost-price and the selling-price of the belts was 5l. or 500l. or 5d. Whether the amounts were large or small made no difference; the case must be the same.

Mr. Hannay: That is so: but de minimis non curat lex.

A man would not be indicted for stealing an orange.

Mr. Avory: I do not understand. Why, I have heard of a man being indicted for stealing a loaf of bread.

Mr. Hannay: People do not think it worth while. I quite agree with you in principle. If any man sold pills to cure certain diseases I do not see why he should not be indicted if anybody thought it worth while.

Mr. Avory (continuing) said that it could not be constituted a criminal offence because the defendants sometimes

The hearing was adjourned.

## Drug-contracts.

The Wolverhampton Guardians have accepted the tender of Messrs. Harris & Co. (Limited) for the supply of drugs, the amount of the contract being 34l. 19s. 1d.

For the supply of drugs to the local Union workhouse, the tender of Mr. C. W. Southern, chemist, Belper, has been accepted.

Mr. F. Lea, chemist, Tontine Street, Folkestone, has been appointed to supply drugs, &c., to the Folkestone sanatorium for the ensuing quarter.

## The Assistant's Tryst.

A chemist's assistant in a pharmacy in Villiers Street Strand, was the principal witness at a Coroner's inquest held on Wednesday, regarding the death of a Miss Fairbrother. He said he had known her for nine years. She was single, and lived under his protection. On Friday evening last he made an appointment to meet her at 10 o'clock at the corner of Arlington Street, Piccadilly. She was some minutes late, and they had "a few words." She said her chest pained her. At this remark she fell down on her knees on the pavement. He got her into a cab and accompanied her home. way home she grew faint. Opposite Brompton Cemetery she laid her head on witness's shoulder, and appeared asleep. The cab was driven in haste to Dr. Butler's surgery in Dawes Road, where it was found she was dead. The jury returned a verdict of death from heart-disease.

## A Customer for Chemicals.

At the Liverpool Police Court, on Wednesday, a man giving the name of Thomas Leach, a returned convict, was charged with attempting to obtain five casks of tartaric acid, value 241. 17s. 8d., by means of false pretences, in December last. Mr. James Law, chemical broker, carrying on business with his nephew in the name of Law Brothers, stated that on December 9 he received a memorandum asking the firm to quote for tartaric acid, &c. He replied, and on December 12, he received a letter ordering five casks of tartaric acid, to be marked in a certain way, and sent to Willesden Junction Station, per L. & N. W. Railway. The writer represented himself as ordering for Messrs. Leach Brothers. Witness wrote to the Guardian Society and received a reply to the effect that Messrs. Leach Brothers was a well-known firm. Witness, believing that he was dealing with Messrs. Leach Brothers,

sent an order to Messrs. Evans, Sons & Co., Hauover Street, wholesale chemists, to forward the five casks of tartaric acid to the address given, and marked as requested, and the order was carried out. A day or two afterwards, in consequence of a communication from the Guardian Society, he wired to Willesden to stop the delivery of the acid, and he also wrote to Messrs. Leach Brothers, of High Street, Putney, and received a telegram. The prisoner had gone to the station with a cart to take away the casks, but he did not receive them.

Mr. Isaac Leach said all the addresses on the document produced were of shops carried on by his firm, with the exception of that at Talbot Terrace, which was a small cottage. He did not know the prisoner, and he had no right to order goods for his firm. There had been several complaints about the prisoner ordering goods.

Prisoner pleaded guilty, and was committed for trial at

A second charge was brought against the prisoner for attempting to obtain over 14l. worth of essences of pear and pineapple from Messrs. J. P. Jackson & Co. (Limited), Duke Street, on December 20. The prisoner adopted the same course as in the previous case, and was committed on this charge also.

## Fertilisers and Feeding-stuffs Act.

At the quarterly meeting of the Worcestershire County Council it was pointed out that there might be appeals against the analyst's decisions under this Act. A member asked who was to pay the costs of such appeals. He presumed it would be the farmer would pay the cost, but agricultural chemists would be prepared to spend a large sum if their products should be condemned. The Chairman suggested that a committee should be appointed to consider the best means of carrying out the Act, &c. The Earl of Coventry moved that the county pay 16s. per sample, and the person submitting the sample 5s. The Rev. Dr. Caldecott seconded, and this was adopted.

The Somerset County Council, at their quarterly meeting, appointed Mr. F. J. Lloyd, F.C.S., as district analyst under the Act for one year at a retaining-fee of 26l. 5s. (to include the charge for the first twenty-five samples analysed), and an additional fee of 11. 1s. for each full analysis and 10s. 6d. for each sample requiring a single determination only.

The Manager of Spratt's Patent (Limited) informed our representative that the firm were taking legal advice in regard to the Act, as it may affect their manufactures. They may make some announcement later on. Their most largely sold products, being foods, &c., for dogs and poultry, would not come within the meaning of the Act, cattle being defined in it as comprising "bulls, cows, oxen, heifers, calves, sheep, goats, swine, and horses." They sell some forage-biscuits for horses, however, and some constitution-powder for calves, which would probably come within the purview of the Act.

A member of our staff called at the offices of Joseph Thorley and saw the manager. That gentleman did not speak very respectfully of the Act. He expects it will be a dead letter within six months. They are not at all afraid of it, but they have taken the sensible precaution of having invoice-forms printed, on which it is stated, in reference to all their products, "All these are compounded." There is no ingredient in any of their foods, he says, which can be described as deleterious or worthless, so that that part of the Act cannot affect them. He ridicules the idea of vendors giving an invoice every time they sell a sixpenny or shilling packet of any such food; but, ridiculous or not, it seems to be the law that they must do so.

## Coroner Baxter on Unqualified Prescribing.

Mr. Wynne E. Baxter, Coroner, held an inquiry at Poplar on Tuesday, touching the death of Ada Jessie Leonard. aged 2 years and 11 months, the daughter of a dock labourer. The mother stated that on Monday week, as the child was ill, she took her to a "Dr. James," in Parnham Street, and he prescribed for the child, saying that she had bronchitis and measles. On Thursday the child was worse and witness sent for "Dr. James," who visited the house and again prescribed for the child. On Friday witness got an order for the parish doctor, who saw the child, hut death ensued shortly afterwards. Robert Hickton, of Parnham Street, Limehouse, stated that he was a herbalist, and kept a shop at that address, the name over the shop being "James." He had no medical qualification. He prescribed a bottle of medicine for bronchitis at the mother's request. He also called and saw the child at the request of the mother. He denied being paid for his visit. Fourpence a bottle was charged for the medicine. He had been in business seven weeks, but was not in the habit of prescribing medicine. The Coroner: I must say you are running pretty close to the wind. You have a perfect right to sell any medicine if it does not do any harm, but no one has a right to prescribe except a qualified man. Mrs. Leonard was recalled, and the Coroner asked her, "Did you think you were having anything to do with a doctor?" Witness: Yes, sir; of course I did. The jury eventually returned a verdict of natural death, the Coroner remarking that the public exposure would do far more good than any censure passed on the herbalist.

## Trade Dinners.

On Saturday last in the Garden Hall, Crystal Palace, Messrs. G. B. Kent & Sons, of Great Marlborough Street, W., entertained a large company of employes and friends to a festival dinner in celebration of the birth of Humphrey Nield Kent (the first son of the fifth generation of the house of Kent in direct succession), and the 118th year of the firm. Mr. G. Harold Kent presided, ably supported by Messrs. Arthur B. Kent and Ernest N. Kent, the latter gentleman being the happy father of the "junior sleeping partner." The dinner passed with that enjoyment and good fellowship between employers, friends, and employed for which the gatherings of the firm are noted, and the climax was reached by a surprise presentation of the employés to Mr. E. N. Kent, for his little son, of a beautiful silver-gilt bowl, cup, and spoon. After the loyal toasts were given the health of the little new arrival was drunk with cheers and, notwithstanding his tender age, "For he's a jolly good fellow." Following Mr. E. N. Kent's reply cheers were called for Mrs. E. N. Kent. The toast of "The Firm" aroused much enthusiasm, and was responded to by Mr. G. Harold Kent, who gave a short biographical sketch of its members from the year 1777, and Mr. Arthur B. Kent, who presented some interesting and remarkable facts concerning the employes present to the number of about 130. Not one of these gentlemen had been less than ten years in the service of the firm, and a large number had done duty for over twenty years. Continuing, Mr. Kent gave particulars of those who had been with the firm over thirty and forty years respectively, and one venerable gentleman (and this was stated with landable pride) had served their interests for sixty-two years. The gathering was a hearty one and a distinct success. Recognising this the assembly before separating called for cheers for Mr. A. Tindley, the genial steward who had looked after the arrangements.

Messrs. Newball & Mason, of the Hyson Green Works, Nottingham, gave their tenth annual "Extract" dinner on December 29. Their herb-store room was decorated for the occasion, and a very pretty sight it must have been, judging from photographs which have been sent to us, showing the place transformed into a banqueting-hall. The programme, which was printed at Messrs. Newball & Mason's works, and is an elegant production, can hardly have been got through yet. It comprises 45 songs, eight readings, musical performances, &c., and only two toasts.

Messrs. T. Howard Lloyd & Co., Leicester, gave their third annual dinner, on Saturday evening, January 6, at the Clarendon Restaurant. The company numbered about sixty, and was presided over by Mr. T. Howard Lloyd, supported by his two sons, Mr. W. H. Lloyd and Mr. A. B. Lloyd. After dinner, Mr. T. Howard Lloyd referred to the steady development of the business during the three years of its existence, and of the kindly feeling existing between the employés and the firm. Thereafter a vote of thanks was accorded to Dr. Pemberton, who had conducted an ambulance class for the employés, at which thirty-eight had attended. The rest of the evening was passed most pleasantly with music, songs, and recitations, of which an excellent programme was submitted.

## Irish Rews.

## Pharmaceutical Society of Ireland.

Preliminary examination:—Messrs. W. Murphy, D. ('McDougall, R. C. Best, H. H. Moore, W. V. Johnston, J. R. McKay, H. A. Magee, and S. G. Mackey passed. Seven were rejected.

Pharmaceutical License examination:—Messrs. R. P. Dickson, C. Macklin, W. C. Harvey, and W. J. Galbraith passed. Two were rejected.

#### Drapers Fined.

In the Northern Police Court, Dublin, on January 5, before Mr. O'Donel, a summons came on for hearing in the case of the Pharmaceutical Society against Messrs. Todd, Burns & Co, Mary Street, Dublin, for keeping a shop open for the sale of poison contained in Fellows' syrup—viz., a quantity of strychnine. The defence was that the bottle was sold without knowing the contents.

Formal evidence having been given, the magistrate imposed

a fine of 5l.

Mr. R. K. Clay appeared for the Pharmaceutical Society, and Mr. Blood for the defendants.

#### Business Changes.

Mr. John A. Woodside, pharmaceutical chemist, Ballymena, has purchased the Medical Hall, formerly owned by Mr. J. L. McAlister, in Corn Market, Belfast.

Mr. J. Andrews, manager of Mr. S. McDowell's Shankhill Road Drug Establishment, has accepted the position of City representative for Mr. S. Gibson, wholesale druggist.

## Scotch Rews.

#### Tyson's Drink-cure.

For some weeks temperance circles in Dundee have been much interested in proposed experiments on drunkards with Tyson's drink-cure, and a Mr. Stephens, who states that he is a member of a London firm of chemists, agent for the cure, had organised a committee to superintend the experi-At a meeting of this committee on Thursday, January 4, ex-Lord Provost Hunter, who presided, called attention to a report contained in the Chemist and Druggist of Australasia, for June, 1893, of proceedings against the Secretary of the Tyson Sanatorium Company, at Melbourne, for an infringement of the Sale of Poisons Act, the allegation being that accused sold poisonous drugs without the same being labelled. Quoting from the report, the Chairman said. that the case against the defender, as stated by the prosecutor, was that two bottles of medicine had been bought from him and given to a patient, who afterwards died, but not as a result of taking these medicines, the verdict of the Coroner's jury being that death resulted from heart-disease. The bottles were seized, and their contents analysed by the Government analyst, who asserted that instead of the medicine being "purely vegetable and harmless," it contained a large quantity of strychnine. The analyst was also, according to the report, prepared to swear that the commercial value of the medicines sold by the defender at 101. 10s. for the pair of bottles was 2s. The ex-Lord Provost read further extracts from the evidence, and concluded by stating that a fine of 5l., with 10l. 10s. of expenses, was imposed. In the face of such statements he said that he did not feel justified in proceeding further in the proposed experiments, and pointed out that the members of committee-

incurred a grave responsibility.

Mr. Stephens stated that within his own knowledge the specific contained no poison, that the Australian analyst was in error, and that Dr. Tyson, whom he had interviewed on the subject, attributed the proceedings taken in the Australian court to the hostility of the medical profession.

Ex-Lord Provost Hunter expressed himself as still dissatisfied, and withdrew, Bailie Smith taking the chair.

A Dundee Advertiser representative has since interviewed Mr. Stephens especially in regard to the composition of the medicine and the precautions which are taken to exclude those who are subjects of heart-disease. Mr. Stephens insisted that the cure is harmless, whereupon the interviewer asked :-

"If the medicine is so innocuous why do you refuse to sell

"Oh, that is easily explained," replied Mr. Stephens. "We find in practice that almost every case of intemperance varies according to the constitution of the patient and to the character of the drink. It must be medically prescribed to be of proper value. The bottles bear no label beyond 'To be taken as directed.' It is false to say that the medicine is worth 2s. only."

"Has Dr. Tyson made money by his discovery?"
"Not yet. He is making money, though. He told me that he had established 102 institutions for the treatment of inebriates, and that the most recent was at Nashfield, Tennessee. We are friends of temperance, and we propose to treat every inebriate who is sent through a temperance society at one-third of the original cost—viz., 3%. 10s. We do not charge for this public test."

"It is not a philanthropic concern, then?"
"By no means. Dr. Tyson, like any other discoverer, de-

serves to reap the benefit of his discovery.

The experiments were commenced in the Dundee Y.M.C.A. on Friday last, a batch of seventeen subjects having been secured, but when the hour of trial arrived only six of the "awful examples" turned up. They were all confirmed drunkards, and each got a bottle of medicine and box of pills, with directions to take a teaspoonful of the former every hour. To show their confidencee in the medicine, and contempt for the Australian analysis, several of the members of committee took each two tablespoonfuls of the "cure," and felt no bad effects from the dose. The subjects have to call every morning for the supply of medicine for the day.

## Glasgow Parish-medicines Contract.

At the monthly meeting of the Glasgow City Parochial Board, held on Tuesday, January 9, the following five offers for the supply of medicines during the next three months were submitted:—Messrs. Brown Brothers & Co., 92l. 13s. 11d.; The New Apothecaries' Company, 93l. 5s.; Messrs. W. & R. Hatrick & Co., 94l. 13s. 10\frac{1}{2}d.; The Glasgow Apothecaries' Company, 95l. 11s.; and Messrs. John Richardson & Co. (Limited), Leicester, 107l. 14s. 4d. The offer of Messrs. Brown Brothers & Co., being the lowest, was accepted.

## Decision in a Patent Liniment Case.

In the Court of Session, Edinburgh, on Tuesday, Lord Stormouth Darling disposed of the actions by Mr. and Mrs. Thomson, 10 Park Quadrant, Glasgow, to have Robert Bell, M.D., physician, 29 Lynedoch Street, Glasgow, ordained to pay them respectively 106l. 12s. 3d. and 426l. 8s. 9d. Pursuers say they lent the defender the money at his request to enable him to manufacture and push the sale of a proprietary medicine called "Dr. Bell's Liniment." The defender said the pursuers were to have an interest in the business and that ultimately it was handed over to them. Lord Stormouth Darling, having referred to the documents in the case, said he could not say the proof was at all satisfactory. dealings between the parties were extremely unbusinesslike. He doubted if any of them had a clear conception of what they intended, and he thought that the evidence of all three was wanting in candour. It was certain that in 1885 the defender had a great belief in his liniment and was anxious to raise money for the purpose of advertising and pushing the sale of it; that on his invitation the pursuers agreed to supply first 500l. and latterly 750l. for the purpose; that they did between January 12, 1886, and March 11, 1887, contribute about 600l., and that nobody else contributed anything; that the business of manufacturing, advertising and selling the liniment was of manufacturing, advertising, and selling the liniment was, during the greater part of that time, and for some months longer, carried on at 51 Woodlands Road, Glasgow, by a firm bearing the fancy name of Ertell & Co.; that the defender for some time conducted the whole business, and then handed over the apparent management of it to a son of the pursuers; that this change coincided in point of time with certain difficulties into which the defender had got with the Medical Faculty to which he belonged, in consequence of his

connection with the sale of a proprietary medicine; that, notwithstanding the change, the defender continued to be consulted about everything that was donc; that the business of Ertell & Co. proved a failure; that the manufacture of the medicine was, in October, 1887, transforred to Messrs. Hatrick & Co., wholesale druggists, Glasgow; and that by a formal deed, dated June, 1891, the male prisoner, in consideration of 150l., assigned to Messrs. Hatrick & Co., with consent of the defender, the liniment and the recipe for its manufacture, of which the male pursuer described himself as the sole proprietor. Pursuers having thus lost a greater part of the money which they contributed, now sue the defender for repayment of it, with interest, on the footing that the transaction was one of loan pure and simple. His Lordship, having reviewed the circumstances under which the money was lent, said he could not doubt that if the business had turned out a success the pursuers would have claimed, and would have been entitled to claim, one-third, not merely of the profits, but of the assets, including the secret of the liniment. He also thought that in any question of liability for debts concerning it arising with third parties the pursuers would have been liable as partners. He said this in full view of the rule of law as expressed in the Partnership Act of 1890, that a contract for the receipt of a share of the profits of a business in lieu of interest on a loan will not of itself make the lender a partner in that business. The question, however, remained whether, assuming a partnership interest on the part of the pursuers, there was not superadded to that a right on their part to claim from the defender at the end of five years, from November 10, 1885, repayment of all that they had paid into the company, with 5 per cent. added. Such a stipulation may not be a very common one, but it is intelligible enough in the case of a patent of this kind. The defender, he found, had incurred such a liability, and his Lordship was at a loss to find any reason for his being relieved from it. Decree would be in the action at the instance of Mrs. Thomson for 387l. 16s. 4d., and in the action at the instance of Mr. Thomson for 96l 8s. 8d. The pursuers' expenses to be allowed, but as they had caused unnecessary expense by denying all interest in the business, the awards would be only two-thirds of the taxed amount.

## Testimonial to Mr. Kinninmont.

A movement has been set on foot in Glasgow for presenting Mr. Alexander Kinninmont with a testimonial in recognition of his long and valued services to the drug-trade in the West of Scotland. The immediate occasion of the testimonial is Mr: Kinninmont's retirement from the Board of Examiners. So far the initiators have met with a splendid response. Mr. Walter Paris, 83 Stirling Road, Glasgow, is acting as Treasurer of the fund.

## French Pharmacentical Mews.

(From our Paris Correspondent.)

IN MEMORY OF CHARCOT.—At a meeting held on Monday at the Paris Faculty of Medicine, the preliminary steps were taken to raise a memorial to Charcot.

THE SALE OF ANTISEPTIC DRESSINGS.—At the instance of the Pharmaceutical Union of the Aube Department, a surgical-instrument dealer of Troyes, named Richard, has been prosecuted on the charge of selling antiseptic dressings without possessing a pharmacist's diploma. Judgment was given against the defendant, but a nominal fine of 25f. only was inflicted, and even this was at once rescinded under the First Offenders Act. M. Richard had, however, to pay 50f. costs, and the antiseptic dressings were ordered to be returned to him.

NEW YEAR DECORATIONS .—The New Year's lists of Legion. of Honour decorations contain the name of one pharmacist only-Dr. Galippe, who also happens to be a medical man. It is interesting to note in this connection that of the few Englishmen residing in Paris who have received this distinction, one, Dr. Douglas Hogg, is proprietor of an English pharmacy, and another, Mr. Eug. Laurier, is a well-known chemical-merchant, and has been closely identified with the British Chamber of Commerce in Paris. Dr. T. W. Evans, the American dentist, holds a high grade of the order, which dates from the Empire.

## Pharmaceutical Society of Great Britain,

## COUNCIL-MEETING.

THERE was a small attendance of the members on Wed-Allon, Atkins, Carteighe (President), Cross (Vice-President), Greenish, Hills, Leigh, Martin, Martindale, Schacht, and J. Rymer Young. The minutes having been read and confirmed, the PRESIDENT intimated that the Society had received a letter from

## THE CAPE PHARMACY BOARD,

thanking the Council and examiners for the manner in which they had received Mr. W. K. Mager, a member of the Board, during his recent visit home. The examiners espacially had given Mr. Mager much assistance, which was of material advantage to the Board, and this was specially acknowledged.

Letters of thanks were also read from Dr. Pedler and Mr. (4. Bult Francis in respect to votes of condolence passed at

the Council's last meeting.

## THE TREASURER INFLUENZAED.

The President apologised for the absence of Mr. Hampson, the Treasurer, who is afflicted with the prevailing malady. He had recovered partly, but not sufficiently to come out of doors.

#### THE LATE PROFESSOR BENTLEY,

The PRESIDENT, again rising, referred to the death of Professor Bentley, saying that they had read much of him, and knew much of bim as an early professor of the Society and one of the honorary members of the Society. He had been a pupil of the professor's, and afterwards a friend for thirty years, and he felt that the highest testimony one could pay to his memory was to recall the feeling of affection which all old pupils had for the professor. Proceeding, the President said although Professor Bentley had not been identified with original research, he was quite capable of súch work, and would have done it had not circumstances prevented him; for he had not the time, and it was necessary for him to earn his living. The Society in its early days could not afford such remuneration to the professors as would allow them to pursue original research. Bentley's reputation was associated distinctly with the Society. He wished to emphasise that for the fact had been overlooked by the lay Press. He, taught that part of botany which related to materia medica, and was the immediate successor of Anthony Todd Thomson, and Jonathan Pereira. Though not a brilliant lecturer, he was an excellent teacher, and the affection and enthusiasm which he excited amongst his pupils would never be forgotten. Bentley had been trained as a pharmacist, and was one of the latest, if not the last, of the brilliant circle which Jacob Bell gathered round him in Oxford Street. Those who remembered him as President of the British Pharmaceutical Conference knew him when he was at his best. The work he had done for science was limited, because his opportunities were few. He was one of the Editors of the Pharmaccutical Journal recommended by Jacob Bell when he presented it to the Society, and in that capacity he gave special attention to new remedies, making his articles so encyclopædic in character that many of them still represent all we know on the subjects. They were prond of Bentley, and could say of him that in all the walks of life he was an honest man. The President then submitted the following resolution :-

This Conneil desires to record the deep regret felt at the death of Emeritus Professor Robert Bentley, honorary member of the Society, professor of botany in the Society's school for thirty-eight years, and professor of botany and materia medica for thirty-five years. It is with a feeling of pride and satisfaction that the Council refers to the long term of valuable service rendered to the Society by Professor Bentley, and to the work he has done outside his professional duties in the subject he had made especially his own. Professor Bentley's loss will be keenly felt by a large etrele of former pupils, colleagues, and friends, by all of whom he w. s greatly beloved.

The VICE-PRESIDENT, in seconding the motion, said that he always regarded Professor Bentley with the highest affection. He was the first professor to introduce him to the School, and he had grateful remembrance of all his kindness. One characteristic of his lectures he could not help mentioning—viz., ho took care to teach his pupils that in admiring Nature they were to look up to the Author of all Nature. It was marvellous to hear how past students spoke of kind old Professor Bentley, and of all the famous men who had died during the latter part of the nincteenth century no better man than he had gone to his rest.

Mr. ATKINS wished to speak of the professor as the father of an old student, for he thought his son would regret if he allowed this opportunity to pass without paying tribute to tbc memory of Robert Bentley. He never forgot his old students, and used to come up to him and ask, "Mr. Atkins, how is the boy?" There was no man more wholly sympathetic than he when a great sorrow came over the lad's life. He mentioned this because it was not an exceptional instance of kindness. He was glad that the Vice-President had spoken of the professor's religious character, for he was a

man of intense religious feeling.

Mr. MARTIN spoke of the professor as a student of twenty-five years ago. He thought they should remember, in making comparisons, the advances which had been made in histology and in perfecting the microscope during that period; and he was sure that Professor Bentley was quite capable of teaching his subjects in the modern way, had the more active period of his life fallen in that time.

The PRESIDENT, in putting the motion, added that Mr. Hampson had wished to express his regret. The motion was

put and carried unanimously.

## MISCELLANEA.

The SECRETARY intimated that the Privy Council had approved of the appointment of examiners made last month. Diplomas were granted to the pharmaceutical chemists

who bave passed the Major examination this month.

A number of persons were elected members, associates in business, associates, and students of the Society. Several were restored on payment of nominal fines.

### FINANCE.

The report of the Finance Committee showed the following figures :-

General Fund:					£	8.	d.
Balance, November 30 Received during December	••		••		764 2.937		9
Paid during December					£2,833 1.353		9
Balance, December 3	1	••	••		£1.478	11	4
Benevolent Fund:-							
Palance, November 30 December receipts		·	••	••	£569 83	7 16	-
December payments	•				£653 43	- 3 6	
Balance					£609	16	10

The Donation account showed a balance of 261. 11s. 5d.; 196/. was invested during the month, and 10/. 10s. was received.

The Orphan Fund also received 10%. 10s. in subscriptions, and 23l. ii 51l. 7s. 7d. in interest, bringing up the bank account to

Payments of 2,650l. 2s. were authorised from the General Fund; this including 300l. for Edinburgh, and 700l. for London, to meet current expenses; 703l. to Mr. Flux for legal charges from June to December, and the usual charges

for rent, publishing, and quarterly salaries.

The PRESIDENT, in moving the adoption of the report, said there was little to comment upon. Major Probyn, a son of an associate in business, had given the donation to the Benevolent Fund. He reminded the members that there was still 2,000l. on deposit in the bank apart from the abovereported balance.

Mr. Young, who seconded the motion, wished to know what the Journal expenses were, and these were explained to him to be routine charges.

The report was then adopted.

## BENEVOLENT FUND.

This report was, as usual, taken in committee. It contained letters from two annuitants-Mrs. O'Reilly and Mrs. Watkins - resigning their annuities, owing to their circumstances having improved. Seven applications for relief were considered, and grants made to six, viz.:—

Twenty pounds to a chemist and druggist, who was an

unsuccessful candidate at the last election.

Fifteen pounds to the widow of a chemist and druggist, who was also an unsuccessful candidate.

Twenty pounds to another unsuccessful applicant. Five pounds to a destitute chemist and druggist. Twelve pounds to give 1l. a month to a widow.

Ten pounds to another applicant. MR. ATKINS, who had presided at the committee-meeting, moved the adoption of the report. He said the letters of the two ladies who resigned the annuities reflected the greatest credit upon them. In this connection he wished to say how much they owed to the Secretary, Mr. Bremridge, for the whole-hearted manner in which he did his work for the Society. It was owing to Mr. Bremridge's thoughtfulness that the scheme of inquiring into the circumstances of annuitants had originated, with the result that funds were made available for the most deserving cases of destitution, and the completely satisfactory way in which the scheme worked was entirely to his credit. They had in Mr. Bremridge a very valued servant. (Hear, hear.) After the letters that had been read (in committee) he would like to read one that Mr. Bremridge had received from the boy who was supported at the Orphan Asylum, Watford, by the Hills fund. It was a touching letter to be written by a boy of nine:-

House of L.O.A., Watford, November 17, 1893.

DEAR MR. BREMBRIDGE,-Mother said you would like to have a letter from me. We are very happy here, but, of course, we want the Christmas holidays to come. It will be seven months since I left home. I g[u]ess baby is such a big girl, I don't expect she will remember me. Little Ethel has deen to see us once. She was very good. Mother said she had talked a long time about going to see Daisy and Joe.

I remain your loving

Joseph Minerr.

Mr. Atkins proceeded to urge the claims of the fund upon the benevolence of the trade. All the cases which had been considered the previous day were of the most touching nature, and the committee had done their utmost to relieve them. They had made grants of 82l., and as 565l. was required for payment to annuitants, it would be seen that they came very close to the 649l. they had in hand. They were granting relief to the fullest extent of their powers, so he hoped that the trade and local secretaries would do their utmost, bad though times may be, to back up the committee

in this thoroughly good work of benevolence.

Mr. Young capped that by saying that at the recent election the men who had supported the Society for years did not win. He did not complain of that, but he appealed to the large mass outside the Society, from whom they elected so many annuitants, to give the fund the best

support in their power.

## THE OTHER BUSINESS

which was transacted was of minor interest. The librarian

and professors had made their usual reports.

The Secretary intimated that he had placed on the register of chemists and druggists the name of Thomas Theodore Thomson, South Tottenham, who was in business

At the meeting of the Board of Examiners in London this month the following were the results:-

Failed. Examined, Passed. . 14 .. Major .. Minor .. 31 17 . . •• .. 207 61

The communication from the Ipswich Coroner recommend-ng that white precipitate should be placed in the first part

of the poisons schedule fell into the General Purposes Committee's report; but the PRESIDENT intima'ed before reporters retired that the Council think it is not desirable to do as the Ipswich jury suggested.

## BOARD OF EXAMINERS FOR ENGLAND AND WALES.

AT the meeting held this month the following was the business done:

### MAJOR EXAMINATION.

Thirty-one candidates were examined; seventeen failed, and the following fourteen passed:-

Crouch, William Samuel, Epson Hebden, Harry, Bradford Trwin, Hubert Aloysius, Watford Kirk, James Robert, Raweliffe Ray, George Wheateroft, Clifton Roberts, William, Holyhen'l Robinson, C. Edwin, Nottingham Savage, George Bernard, Brighton Shepher), James Henry, Leicester Smith, Alfrel Jason, Gloveester Smith, Frank, Bay wat a Southall, Allrel Wm., Birming un Surflect, Arthur Frederick, Louis Williams, Edwin, Liverpool

### MINOR.

Two hundred and seven candidates were examined; one hundred and forty-six failed, and the following sixty-one passed:

Auderson, David, London Bates, Betsy Helen, Oldham Bowen, John, Machynlleth Braund, Henry, London Bridgwood, Walter Stuart, Birmingham

Carter, Henry George, Birmingham Challis, Frank, Langport Collier, Frederick Tames, Birmingham

Davidson, Albert Edward, Scaliam Harbour

Dawson, Sidney William, Grantham Dealve, Albert Ernest, Tavistock Dimean, Henry Richard, Gloucester Edwards, Thomas, Pontypridd Elliott, Frank Lancelot, Nottingham Ellis, Frederic Richard, Liverpool Foden, Thomas Henry, Liverpool Fresson, Charles Sherwin, Tuxford Gamble, Frederic William, King's

Gee, Ernest Mackworth, Spalding Gibson, Harry, Knutsford Gillett, Albert Ambrose, London Green, George, Bristol Greenwood, Solomon, Wisbeeh Harkness, James Baird, Bridgwater Haywood, Herbert, Coventry Herman, Robert Charles, Liverpool Hillman, Edward Stowers, Bristol Hilton, David, East Dereham Holder, Harry Gibson, Wareham Hope, Richard, Westhoughton Hughes, Joshna Arthur, Aberearn

Humfrey, William Henry, Romford lugall, Sidney Herbert, Ashford Jones, Alfred William, Worcester Judge, Arthur, Belper Laybourn, Robert George, Grantham Le Scelleur, Thomas John, Jersey Littlefield, Robert Dexter, Ventuor Mercer, Frank Norland, Farnworth Moore, Francis Henry, London Moore, John Edward Langford,

Welshpool Moorman, Charles Edgar, Shankli ) . Moss, Ernest Robert, Mansfield Neave, Arthur Reynolds, Bath Newcy, Thomas, Chesterfield Newman, Ernest Harry, Totnes Nicholson, James, Haverfordwest Palmer, George William, Ely Payne, Hiram, Brynhyfryd Roberts, Robert, Menai Bridge Sculdiam, Frederick Henry, Market Rasen

Shipman, Caleb Edward, Bournemouth Short, William John, Portsmonth

Smithies, William Henry, Bradford Springett, Basil Charles William,

Thompson, Joseph George, Mary part Udale, George William, Cheadle Williams, Harry Griffith, Sheffield Williams, Roger Matthew, Aberga-

Wood, Uriali, Arnold Woods, Francis Edwin, Birminghum

We have received the above from the Registrar of the Society.

## FIRST OR PRELIMINARY EXAMINATION.

THE following are the questions given on Tuesday, January 9:--

## LATIN.

(Time allowed - from 11 A.M. to 12.30 P.M.)

I. For all candidates. Translate into Latin: -

- 1. Thou hast not praised the general's army.
- 2. A great battle has many dangers.
- 3. The temple was surrounded by the enemy.
- 4. The wails of the elty were 100 feet high. 5. The men who followed the king were quickly conquered.

II. Translate into English either A (Caesar) or B (Virgil).
(Candidates must not attempt both authors.)

#### A CAESAIL

- 1. Nam propter frigora, quod Gallia sub septentrionibus, ut aute dictum est posita est, non modo framenta in agris matura non erant, sed ne pabuli quidem satis magna copia suppetebat : eo autem framento, quod fiamine Arare navibus subvexerat, propterea uti minus poterat, quod iter ab Arare Relvetii averterant, a quibus discedere nolebat.
- 2. In castris Helvetiorum tabulae repertae sunt litteris Graecis confectue et al Caesarem relatae, quibus in tabulis nominatim ratio confecta erat, qui numerus domo exisset corum, qui arma ferre possent, et item separatim pueri, senes, mulieresque. Quarum omnium rerum summa erat capitum Helvetiorum milia ecunii, Tulingorum milia xxxvi, Latobrigorum xui Rauricorum xxiii, Bolorum xxxii; ex his, qui arma ferre possent, ad milia uomaginta duo.

Grammatical Questions .- For those only who take Caesar.

- 1. Decline in full (in the singular) totius insulae, and (in the plural) optimi duces.
- 2. Give the principal parts of possum, note, co, fere, farce, nuntio, vive, rincio, sepelio, gero.
  - 3. Parse fully :- "qui numerus domo exisset eorum." (Paragraph 2)
- 4. What eases are used in Latin to express (i.) motion to a place, (ii) measure of space?

#### B. VIRGIL.

- 1. Sie ait, et dicto citius tumida aequora placat, Collectasque fugat nubes solemque reducit. Cymothoë simul et Tritou adnixus acuto Detrudunt naves scopulo: levat ipse trideuti Et vastas aperit syrtes et temperat aequor, Atque rotis summas levibus perlabitur undas,
- 2. Vultis et his mecum pariter considere regnis ;
  Urbem quam statuo, vestra est; subducite uaves;
  Tros Tyriusque mihi nullo discrimine agetur.
  Atque atinam rex ipse Noto compulsus codem
  Afforet Aeneas I Equidem per litora ecrtos
  Dimittam et Libyae lustrare extrema jubebo,
  Si quibus ejectus silvis ant urbibus errat.

Grammatical Questions .-- For those only who take Virgil.

- 1. Decline in full (in the singular) totius insulae, and (in the plural) optimi duces.
- 2. Give the principal parts of possum, nolo, co, fero, favco, nuntio, viro, vincio, sepelio, gero.
- 8. Parse fully :- "Tros Tyrinsque mini nullo discriming a jetur." (Passage 2.)
- 4. Winat cases are used in Latin to express (i.) motion to a place, (ii.) measure of space?

## ARITHMETIC.

(Time allowed-from 12.30 P.M. to 2 P.M.)

(The working of these questions, as well as the answers, must be written out in full.)

- 1. What stock of coals is required in order to supply 12 fires for 54 weeks, each fire consuming 1 cwt. 1 qr. 14 ib. of coal weekly?
- 2. The expense of making the hay of 5 acres 3 roods 15 poles of meadow land amounts to 61, 1s. 2d.; find what the expense is per acre.
  - 3. Simplify  $\frac{4}{6}$  of  $6\frac{1}{4}$  of  $21\frac{9}{8} + 70\frac{5}{14} + 105\frac{3}{4}$
  - 4. Multiply 457.61 by .527, and divide 477.5585 by 21.351.
- 5. Into how many farms, each containing 12 bectares 1 are 4½ centiares, can an estate of 1825 hectares 58 ares 84 centiares be divided?
- 6. A merchant buys 100 gallons of wine for 1251, and sells it at 26s, per gallon; what is its gain per cent.?
- 7. A person invests 2,852*l*. in railway shares at 115, the annual dividend on each share being 5*l*. He afterwards sells out at 125, and invests the proceeds in a 3 per ceut, stock at 93; find the difference in his income.

## ENGLISH.

(Time allowed-from 3 P.M. to 4.30 P.M.)

- 1. Analyse:—"I was grieved when I beard how he had obtained the character which he boro among his neighbours."
- 2. Parse the following words in the sentence given in Question 1:—when, how, which, bore, among.
- 3. Correct the following sentences, giving your reasons:—
  - (1.) She looked splendidly in her new dress.
  - (ii.) The river in that part was to broad to jump.
  - (iii.) The box was one of them that opens at the end.

- 4. In the following passage supply the necessary capital letters, and put in the stops and inverted commas where necessary:—i am not so sure of that sufit tunstall though i have never been across the murray and dont intend to go us far us i know as for sheep I hate them and i hate shepherds hazy crawling wretches they and the sheep are just fit to torment one another besides how do you know these great profits are made youre not much of an accountant jack excuse me
- 5. (This must be attempted by every candidate.) Write a short composition ou one of the following subjects:—
  - (i.) A visit to a cathedral or abbey.
  - (ii.) Prevention is better than cure.
  - (iii.) Early rising.
  - (iv.) Diffeence makes all things appear casy.

## WILLS OF DECEASED CHEMISTS.

On July 6 probate was granted on the will, dated June 8, 1888, of Richard Sowerby, ehemist and druggist and oilman, late of 5 North Street Middlesborough, Yorks. The testator bequeathed all his household effects to his widow, who was appointed joint executrix with John Taylor, warehouseman. A legacy of 50l. was left to each of the executors, and the rest of the real and personal estate (to be realised and the proceeds invested at the discretion of the executors) to the widow; in the event of the second marriage or death of the latter the property passes to the children in equal shares. If any of these be deceased and have left children, these (grandchildren of the testator) are to divide equally the share which would have fallen to the parent. The gross value of the personalty was estimated at 4,992l. 1s. 5d. Whether the business were disposed of or carried on (under the management of the said John Taylor by the testator's wish) was left to the judgment of the executors. In either case of course the proceeds (or income) were to be the widow's under the conditions referred to.

The will, dated June 9, 1893, of the late Mr. Charles William Henry Llewellyn, ehemist and druggist, of High Street, Hitchin, Hertfordshire, who died on September 27 last, has been proved at the principal Probate Registry in London by Mrs. Anne Sarah Llewellyn, widow, and Mr. Edward Cloudesley Perks, ehemist, of 1 Sloane Square, brother-in-law of the deceased. The gross value of the personalty amounted to 1,9951. 15s. Power to prove hereafter has been reserved to Mr. David W. H. Llewellyn, testator's nephew, the other executor named in the will. The testator devises and bequeaths the whole of his property, real and personal, to his widow absolutely, and appoints two guardians to two infant children.

The will and codieil of the late Mr. Charles K. Tomlinson, J.P., of Beaumont Manor, Lineoln, who died on November 8 last, has been proved by Mr. Charles Scorer, one of the executors, power being reserved to Mrs. Tomlinson, the widow, to prove hereafter. The gross personal estate amounts to 53,804l. 3s. 1d. The testator leaves his interest and shares in the firm of Robey & Co., engineers. of Lincoln. to Mr. C. Scorer in trust for the benefit of his widow. His share and interest in the business of manufacturing chemist, carried on in partnership with his nephew, Mr. C. P. Hayward, the testator bequeaths, together with the shop, house, and premises, to his said nephew, Mr. Hayward, subject to the payment of 4,000l. to testator's widow, 50l. to Mr. Wilson (one of the business staff), and sundry legacies to friends. The residue of his property the testator bequeaths and devises to his widow.

The will of Mr. Joseph Clemishaw, formerly in business at Bury, a wholesale ehemist, but who died on May 15, 1893, at Ilkley, retired, has been proved at the District Probate Registry by the aeting executors. The value of the personal estate and effects amounted to 13,9981.9s. 11d. The testator bequeaths the house, shop, warehouse, and premises, now in his son's (Joseph Henry) occupation, to his said son; and the house and premises, 99 Brookshaw Terrace, Bury, to his daughter, Jane Elizabeth. His plate, linen, furniture, and the whole of his property, real and personal (not previously disposed of), the testator bequeaths and devises to his said son and daughter in trust for the benefit of his widow for life, with remainder to his said son and daughter in equal shares,

## Pharmaceutical Society of Freland.

THE monthly meeting of the Council was held at the Society's House 67 Lower Mount Street, Dublin, on Jan. 3, at 3 P.M. Present:—The President (Mr. William Hayes), in the chair; Mr. Beggs (Vice-President), and Messrs. Wells, Grindley, Charles Evans, Simpson, Hodgson, and S. P. Boyd.

THE EXAMINATIONS. THE OFFICIAL VISITOR'S REPORT.

A letter from the Privy Council Office transmitted the following report made by Dr. George F. Daffey to the Lord Lieutenant:

May it please your Excellency,—I have the honour to submit herewith my report on the examinations of the Pharmaceutical Society of Ireland that have been held during the year 1893.

#### PRELIMINARY EXAMINATION.

Seventy-seven exudidates presented themselves for this examination. It was, as usual, held quarterly, and was conducted under the same regulations as those stated in my last report, and by the same examiners as those in office during the year 1892. Of the 77 candidates, 52 (67.5 per cent.) passed, and 25 (32.5 per cent.) were rejected. This is a slightly higher percentage of passes than that of the previous year, in which the percentage of successful eandidates (66 per cent.) was higher than it had been for the preceding seven years (see report for 1832); 22 of the enodidates had been previously rejected at a Preliminary examination of the Society, 15 once previously, 4 twice, and 3 three times previously. With the exception of 4 candidates in the first category who were again rejected, the remaining 18 passed. Most of the failures, involving the rejection of candidates, were in arithmetic and in weights and measures; 4 candidates were rejected in the single subject of weights and measures, as were also 2 in English, 2 in geometry, and 1 in algebra. But, in the majority of cases, the unsuccessful candidates failed to obtain the percentage required to pass in two or more subjects. Thus 4 eaudidates failed in arithmetic as well as in weights and measures, and in algebra. From an analysis of the subjects in which the required percentage was not obtained, it appears that there were-in arithmetic 12 failures, in weights and measures 10, in algebra 8, in geometry 7, in English 6, in Latin 4, and in an optional subject 2 failures. According to the regulations 50 per cent, must be obtained in English, in arithmetic, and in the British and metrical system of weights and measures, and 40 per cent. on the entire course, to entitle a candidate to pass. In the other subjects of the course, Latin, algebra, geometry, and one optional subject, it is only necessary to obtain the extremely low standard of 20 per cent. in order to pass. In marking for English, 20 marks are allotted for grammar and composition, and 10 for dictation. It is not necessary to obtain 50 per centin each division of this subject to pass; but if a candidate gets a total of 15 marks (=5) per cent.) between the two divisions, he is entitled to pass. Thus, two unsuccessful candidates were awarded 13 for composition and grammar, and 2 (=20 per cent. only) for dictation. Similarly, in Latin, in which 4 marks out of a total of 23, equally divided between translation and parsing, must be obtained in order to attain a pass, candidates were passed who were given only a single mark in either translation or in parsing, but whose total in both amounted to 4 marks. The extent of a successful candidate's knowledge of Latin that, at this examination, is indicated by an award of 10 per cent. for translating from five to eight lines either from the First Book of the " Æneid " or from the First Book of "Cæsar's" Commenturies, can hardly be considered ereditable or satisfactory. In the last report attention was directed to the fact that the examiner had allowed 14 candidates to pass the examination although they had failed to seeme in certain subjects the required minimum pass percentage. The examiner's "liberty to pass" candidates who-"if their general information and intelligence cutitle them-may not in some one subject have attained to the standard laid down," is subject to the ratification of the Conneil. It appears that such ratification was not obtained in any of the eases above referred to during 1892. This year four similar breaches of the regulations, all on the subject of weights and measures, occurred. Two candidates also were passed by the examiner, subject. however, to the ratification of the Conneil. Candidate A was given a cipher for his answers to the (two) questions in weights and measures. Although he got full marks-10-for arithmetic and for algebra (four questions in each paper), he was awarded only the bare pass-marks-2 out of 10-in his optional subject, and 10 only out of 20 for six questions, ineinding an essay on one out of three given subjects, in English grammar and composition. Candidate B obtained 4 out of a maximum of 10 in urithmetic, and the bare 20 per cent, that entitles a candidate to pass He did not attain fall marks in any of the other subjects. a satisfactory knowledge of arithmetic and of weights and measures is so necessary for pharmaceutists, the judgment of the examiner in passing these candidates, ratified as it was in two cases by the Council, appears indicative of a leniency in this examination that I have previously called attention to. Although the subject of weights and measures has the same value (10) as arithmetic, and is marked separately on the examiner's report of the result of the examination, the questions on both subjects were given on the same paper; but only one or two questions out of the six or seven usually set concerned weights and measures. The same question one relating to the metric system—was set at two successive examinations during the year. The recommendations made in the last report, as well as in previous ones, that a second examiner should be appointed for the Prellminary examination, was approved by the Conneil of the Society at its meeting on February 1, 1893, but has not yet been adopted. Judging from some remarks officially reported to have been made by the President and a member of the Council at the monthly meeting of the Connell in November last, the regulation (11). Preliminary Examination, see Calendar 1893, p. 110) as to the fee to be paid for the examination of each candidate-viz., "half a guinen to each examiner" seems to have been overlooked. It would be contrary to this regulation to reduce by one-half, as mentioned, the fees of the pre-eat examiner (who has two years more to serve) in order to pay a second examiner. If the fee that candidat's pay at present for this examination (21. 2s.) is left as it is, there would, of course, be a pecuniary loss to the Society "to a certain extent" when a second examiner is appointed. There can be little doubt, however, that much needed improvement in the examination would result by at once carrying into effect the resolution of the Conneil; and that the status of the Society, as judged by the educational as well as the scientific attainments of the liceutiates, would be thereby greatly increased.

## LICENCE EXAMINATION.

Forty-three candidates being three more than in last year-presented themselves for this examination. Twenty-nine, or 67.4 per cent., passed, and 14, or 32.6 per cent., were rejected. These percentages are, cariously enough, ulmost identical with those of the Preliminary examination. Last year the perceotage of successful candidates for the licence-85 per cent. -was the highest that hal been attained in the history of the Society. That percentage was reduced this year by 176 per cent. The largest number of rejections were due to defective answering to the questions on the pharmacy paper. The examination in phurmicy consists of three parts, each of which has a minimum pas: standard; and failure in any one part of this, or in any of the other two divisions of the examination involves rejection, as it should do also in the Preliminary examination Part 1 (compounding) embraces a thoroughly practical examination in compounding and dispensing typical original prescriptions. Every candidate is given four autograph prescriptions, each of which is for a different form for the administration of medicine. There is no fixed time, but two hours generally are allowed each candidate for this portion of the examination. The minimum pass-mark is 131 out of 30 marks. Two only of the unsuccessful candidates failed in compounding, thereby showing a marked improvement over former years. Part 2 is an oral examination, generally occupying twenty minutes, in the recognition of sperimens of the materia medica and preparations of the British Pharmacopoeia, with questions on their maunfacture and on the provisions of the Sale of Poisons Act. The doses of a unorber (about twenty) of drugs and preparations, chiefly dangerous ones, are then asked; and the candidate is subsequently required to read two or more antograph prescriptions in full Latin, give the proper translation, and answer any points that may arise in connection with the prescription. The maximum for this part is 49; and the minimum-which nine candidates failed to Another emiddate who wanted 3 marks of this obtain is 18. minimum and 11 of the minimum total (45 per cent.) in the whole subject was passed, after consultation, by the examiners. His grand total was high. In the third part the written examination -the minimum and maximum standards for which are the same as those for the practical (compounding) part, there were as many as twelve failures. In addition, another candidate, with only 7½ marks, was passed by the examiners. He had done well in the other parts of the pharmally examination. These failures appear to show a want of systematical theoretical instruction and methodically directed study in those parts of the subject of pharmacy especially particularised. The same remark may be made as regards bottny and materia medica, in each of which subjects six candidates failed. In the former, as frequently mentioned in previous reports, marked ignorance of the subject was displayed by many of the candidates. A number of the most ordinary botanical specimens could not be identified, much less described. Tims, a candidate shown a "snapfragon" said it was a "wallflower," and another had no idea of what kind of a flower the "butcher's broom" was, or to what natural order it belonged. Both candidates were rejected. Similarly, in materia melica, candidates generally recognised most of the specimens shown them; but few could tell what the characters of the drug were, as given in the British Pirumacopeia, or what was its composition. For these reasons it is satisfactory to report that the Council of the Society last November unanimously adopted the following resolution :- "That on and after July 1, 1834, every candidate for the Pharmac utical Licence exam ination shall be required to present, in addition to the other certificates required, one of having attended a course of botany and materia medica at some school recognised by the Society." This resolution is a logical sequence of that previously adopted with such good results by the Society

<sup>·</sup> See The Chevist and Dauggist, November 11, 1893, page 704.

requiring a certificate of attendance on a course of practical chemistry for three months, with netual bench-work for 100 hours during said course. Experience shows that without some such compulsory curriculum preparation for pro-essional evanuinations is often upt to resolve itself into the worst form of "cram." In a blition to failure in one or (generally) more subjects of the examination, none of the 14 unsuccessful candidates with one  $\operatorname{exce}_c$ tion, maje the grand total of 165 marks on the whole examinations required in order to pass. An excellently-fitted and well-furnished pharmacy has been put up in the examination-room, and will doubtless be a great convenience to the examiners as well as to the cambidates.

I have the honour, &c.,

GEORGE F. DUFUEY, M.D., Visitor.

The report of Dr. Duffey was referred to the Law Committee.

### CORRESPONDENCE.

A letter from the Pharmacy Board of the Cape of Good Hope was received with an accompanying copy of the Medical and Pharmacy Register of that colony.

Thanks were voted to the donors.

A letter was received from the Association Belge de Chimistes announcing their intention to hold an International (longress of Applied Chemistry in Brussels commencing on August 4 next.

A letter from the Dean of Andersons College Medical School, Glasgow, thanked the Council for having added that

College to their list of recognised chemical schools.

#### PHARMACEUTICAL WITNESSES.

A letter from Mr. l'atrick D. Foley, Medical Hall, Killarney, complained that he was offered 7s. 6d. only for a day's attendance as a witness at the last summer assizes held in Tralee, which he refused to accept.

Mr. Grindley said members of the Society who were summoned to courts as witnesses ought to be properly

remunerated.

The PRESIDENT: Who is the person to apply to?
Mr. Wells: We should consult Mr. Clay as to what can legally be allowed. I observed a case in England in which a pharmaceutical chemist expressed the opinion that he was not a "professional" man, but the Judge informed him that he was.

It was decided to consult the Council's solicitor on the subject.

#### JOHN FARLOW alias DR. FRANKS.

The President moved, pursuant to notice, that the Lord Lieutenant and Privy Council be requested to direct that the name of John Failow alias "Dr. Franks" be removed from the register of chemists and druggists, that person having been convicted of a breach of the Pharmacy Acts hy keeping open shop and compounding without being qualified to do so. This John Farlow had lately figured before the world in some very nefarious matters; and it had been hrought under the notice of members of the Council that his name ought before now to have been erased from the roll of members for breaches of the Pharmacy Acts

The VICE-PRESIDENT seconded the motion, which was

unanimously agreed to.

## NOMINATIONS TO MEMBERSHIP.

Mr. J. J. McHugh, Woodstock, Athy, and Mr. G. G. Fetherstone, Great Britain Street, Dublin, were nominated for membership of the Society.

Other business having heen disposed of, the Council

adjourned.

THIS EXPLAINS IT .- Stivets: The German investigators are experts in bacillus hunting, aren't they? Whiffet: Well, wouldn't you naturally expect a germ-man to cholera microbe ?-North American Practitioner.

THE REDDENING OF CANADA BALSAM may be checked and the balsam bleached by the addition to the solution of a few crystals of pure metallic copper, precipitated from copper-sulphate solution by any of the ordinary methods.

PIL. COLOC. Co. + x PATENTED.—Mr. A. Cartwright, Loughton, Bletchley, Bucks, has obtained a patent for aperient and antibilious pills (14,921). Consist of ipecauanha, aloes, scammony, colocynth, sulphate of potash, oil of cloves, and extract of hyoscyamus, with a sufficient quantity of treacle to make a mass.

## The Winter Session.

### SOCIETY OF CHEMICAL INDUSTRY.

LONDON SECTION.

MONDAY evening was devoted to a discussion on the patentlaws of this country. This is a subject which the members are supposed to have very much at heart, but the attendance was small, and the discussion somewhat trivial and confined to a narrow circle of speakers. Some time ago the Society appointed a committee to consider the whole question of improvement of our patent-law, and after careful consideration the committee came to the conclusion that the appointment of a Royal Commission would most effectively conduce to the object in view. They proposed to prepare for presentation to the Government a memorial praying for the appointment of such a Commission, and to obtain, if possible, the support of other public hodies, such as the various Chambers of Commerce, the Society of Arts, the Institution of Civil Engineers, the Chartered Institute of Patent Agents, and others, in presenting the memorial.

The committee also submitted several suggestions for the emendation of the existing statutes. Under sections 4 and 5, in granting patents to foreign subjects, it is not at present necessary for them to have agents resident in this country responsible for the patent or to be resident themselves, and it is now possible for a person to secure protection in this country for an invention to which he is neither entitled as the true discoverer, nor has any legitimate right as the

introducer.

Mr. NEWLANDS, in leading off the discussion on this, proposed that the law should he altered so as to make the actual inventor, and not his agent, apply for the patent.

Mr. C. C. HUTCHINSON seconded, and said that foreign

applications were treated by the Patent Office in a slipshod manner as compared with English applications, and all that

was necessary was to equalise.

Mr. TYRER followed with a suggestion that applicants for patents should deposit specimens of the products for which they claimed protection. In the department of colouring-matters especially—or 36-syllable chemistry, as he preferred to call it—specimens of the products said to he obtained by a specific process would tend to prevent litigation, or settle it when it did come along.

Mr. HUTCHINSON said that scheme had not worked well in the United States, and it had been abandoned. It came to be troublesome when the patent-officials had to deal with

such substances as nitro-glycerine.

Admiral SELWYN pointed out that under section 5 the domicile of the applicant must be stated, and that sufficed for serving notice of opposition.

After some further discussion the proposal was adopted. The second proposal by the committee pertained to the method of examination in this country, which, it was held, required careful reconsideration. Dr. LEONARD THORNE started the discussion on this, pointing out that the American system of lodging affidavits, and appearing, if necessary, before the examiner and Commissioners of Appeal, is more satisfactory and less costly than the English method of

Admiral Selwyn stated that the International Congress on Patents objected entirely to the method of examination, and recommended that examination should be confined to

documents in office.

Mr. HOWARD JONES, Mr. CRESSWELL, and others continued the discussion.

Dr. Edmonds, a patent-specialist, also contributed to the discussion, pointing out that no matter how the law is altered there remains the fact that the great difficulty and source of most litigation lie in the interpretation of two specifica-tions for a similar subject. That would remain no matter how the law is altered. Dr. Edmonds condemned the system of examination as pursued in the United States. He also objected to the large fees, and suggested that the Patent Office should undertake examination of prior documents relating to the subject of an invention for a fee of a guinea

Admiral Selwyn remarked that that was what the International Congress proposed.

Sthers joined in the discussion, Mr. NEWLANDS pointing out that examinations of specifications and claims would cost the country the whole of the patent-surplus (200,0001.) at present paid into the Consolidated Fund. However, when it came to the vote he was the only one who held up his hand against the motion, but there did not seem to be more than half-a-dozen altogether voting.

The next recommendation by the committee was that provisional protection is open to abuse. In the course of the discussion by previous speakers, it was pointed out that inventors work up their processes between provisional and complete specification, so that the latter became a great advance over the former. Dr. Edmonds said the whole trouble was due to

the squeamishness of judges in not administering the law on

that point rigidly.

Ultimately the meeting agreed with the committee. The other recommendations were—under sections 18, 19, and 20, that the powers of amendment and disclaimer require reconsideration; that section 22 requires revision; a reduction of annual fees; that legal proceedings under section 28 are highly unsatisfactory; and that there should be means of making additions to existing patents without taking out new letters patent. The meeting was strongly of opinion that the patent fees should be reduced.

## SCOTTISH SECTION.

A MEETING of the Scottish Section of the Society was held in Glasgow on Tuesday evening. The subject of discussion

was the same as at the London Section.

Mr. CHARLES A. FAWSETT opened the discussion. In the course of his remarks he said that on one point the American patent-law was superior to our own in that prior publication did not invalidate. It was generally thought, he believed among manufacturing chemists, at any rate—that patents were far too easily got in this country, and very much too difficult to defend. There were hundreds of patents taken out in this country for the manufacture of aniline dyes by the principal firms in Germany, but it was well known that these dyes were never manufactured in this country. It would be very valuable if these firms were forced to manufacture in this country. If that were done, our workmen would be educated, and, of course, indirectly it would benefit technical education, and raise the standard of our chemists and the teaching of organic chemistry.

Mr. J. S. MACARTHUR said that, notwithstanding its many and manifest defects, he would rather have the British than either the German or the American patent-law. One reason why the manufacture of the dyes mentioned was not conducted in this country was because of the absurd duty which our Government put upon alcohol, which entered into the manufacture of all those dye stuffs.

After further discussion, it was remitted to the Patentlaw Sub-Committee of the Society to more fully consider the suggestions made.

BRIGHTON JUNIOR ASSOCIATION OF PHARMACY. At the meeting held on Wednesday, January 3, a paper was read by Mr. C. S. ASHTON on

## A GLANCE AT THE PAST: SNAKES AND PHARMACY.

The author went as far back as two centuries B.C., giving numerous references and quotations from such ancient authorities as Musa (a Greek physician) and Andromachus, physician to Nero. He referred also to the origin of the symbol of the scrpent entwined on a staff in the Pharmaceutical arms. The story runs that Esculapius, the Greeian god of healing, was standing, staff in hand, by the bedside of Glaucus, when a serpent crawled into the room and twined itself on the staff. Esculapius immediately slew the reptile, but had no sooner done so than a second serpent entered the room bearing a leaf in its mouth, crawled up to its dead comrade, and immediately restored it to life. Thereafter the serpent was connected with the science of healing.

Instances were also given of ancient and comparatively modern formulæ containing the viper, one such formula being embodied in the first London Pharmacopæia, about 1654.

A vote of thanks followed.

### THE PROGRAMME

for the remainder of the session contains the following items:

Wednesday, January 24.-Paper on "Facts about Evolution," By B. Lomax, Esq., C.E., F.L.S.

31. Junior Pharmacy Ball.

February 7.—Discussion on the Proposed Code of Ethics.

14. Smoking-concert at the Chrence Itoms.

21.- Paper. Mr. Geibler.

28.—Social and Musical Evening.

J. R. Gwatkin, Esq., Presiding.

7. Burroughs & Wellcome's Priz Competition.

14.—Smoking-concert at the Clarence Rooms.

21.—Annual General Meeting.

28.—Conversazione. 33

In a circular which has been issued to the members, it is mentioned that the committee have combined with the Senior Association in holding the smoking-concerts. Attention is also called to the following prizes:-

Two prizes-11, Burroughs, Wellcome & Co.; 10s., Association (for the best essay on any subject, to be read on

March 7).

Two prizes 11.1s, W. H. Gibson; 10s. 6d., W. W. Savage (for elementary inorganic chemistry); for apprentices of

Brighton only.

Two prizes-1l. 1s., W. D. Savage; 10s. 6d., J. R. Gwatkin (for herbarium of indigenous medicinal plants in any Pharmacopoia of the present century).

## CHEMISTS' ASSISTANTS' ASSOCIATION.

THIS Association began its half-session with a musical and social evening, on Thursday, January 4. The chair was taken by the President, Mr. E. F. Harrison, and the arrangements were carried out by Mr. H. A. D. Jowett.

At this meeting Mr. DAVIES gave notice that he should move the following resolution at the meeting on January 11:-

That the Council be requested to take into consideration the desirability of organising Sunday outings for the Association, and to make arrangements for the same.

## GLASGOW AND WEST OF SCOTLAND PHARMA-CEUTICAL ASSOCIATION.

AT the fortnightly meeting of this Association held, under the presidency of Mr. W. L. Currie, on January 4, Dr. JAMES KERR LOVE, lecturer on otology in St. Mungo's Medical School, delivered an interesting lecture on "Hearing in licalth and Disease.". The first part of the lecture was devoted to an explanation of the anatomical structure of the ear and the theory of sound, and was illustrated by diagrams and a syren. As the result of about 200 experiments he had made upon different people, Dr. Love found that pianists, organists, and trained musicians generally could appreciate to a certainty from  $\frac{1}{64}$  to  $\frac{1}{80}$  of a semitone. In speaking of the ear in disease, the lecturer urged his druggist friends to use all their influence in getting people to lose no time in attending to their ears as soon as the slightest symptom of disease manifested itself. By attending to the ear in the very earliest stage of disease, not only would that more torrible result be avoided-disease of the brain itself-but deafness would be much more easily treated, and the hearing more easily restored, than if delayed. In Glasgow and neighbourhood there were about 813 deaf mutes. It was a great mistake, however, to think that those unfortunate people were all stone-deaf. Out of 175 children in deaf-and-dumb institutions in Langside upon whom the exporiment had been tried, only 9 were unable to hear the ring of a small handbell, and 25 per cent. of that hear the ring of a small handbell, and 25 per cent. of that number had a remnant of hearing left, which could be utilised in teaching, but which, he was sorry to say, was never, or very rarely, used. Then, out of 153 children in the same institution, it was found that the majority had been born with the hearing faculty. He believed many children, supposed to have been born deaf, had become so in consequence of disease in infancy. The lecturer, in conclusion gaves come interpring details regarding the methods of sion, gave some interesting details regarding the methods of educating the deaf-mutes.

## Personalities.

A PORTRAIT and biography of Mr. A. Sidney Campkin, chemist and druggist, Cambridge, Past Grand Master of the Manchester Unity of Oddfellows, appears in the Friendly Societies' Recorder for January.

AMONG the successful candidates at the January Minor examination was Miss B. H. Bates, eldest daughter of Mr. Henry Bates, chemist, George Street, Oldham, and niece of the local secretary for Oldham. Miss Bates had studied at the Manchester College of Pharmacy, and is said to be the first lady who has passed this examination from Lancashire.

Mr. R. Ingham Clark, the well-known varnish-maker has purchased the beautiful marine estate of Glen Caladh, near Tighnabruaich, in the Kyles of Bute, Argyllshire. The mansion-house is one of the finest on the west court of Scotland, and situated amidst magnificent scenery. The lands extend to 1,000 acres, and afford excellent shooting.

ONE of the authorities on Indian materia medica is Dr. T. E. Burton-Brown, C.I.E., an old Guy's man, and graduate of the London University. On the establishment of the Medical School at Lahore, in 1862, he was appointed Professor of Botany, Chemistry, and Materia Medica in that institution, as well as Chemical Examiner to the Government of the Punjaub. He is particularly well versed in the flora of the Punjaub.

WE understand that 'Mr. R. R. Maitin, late of New York, has undertaken the general management of the business of Messrs. Oppenheimer, Sons & Co. (Limited). Mr. Martin is a Canadian by birth, and a graduate of the Ontario College of Pharmacy, Toronto. After his retail experience Mr. Martin went to the United States, and for several years was one of Messrs. Parke, Davis & Co.'s staff. In that position, and as an active member of the American Pharmaceutical Association, Mr. Martin became well known to American pharmacists. For some years back he has managed the New York branch of Messrs. Sharpe & Dohme's business, and it has developed so well under his care that the tirm have recently made New York their headquarters. Mr. Martin brings with him to England several American interests which will be associated with the house of Oppenheimer, but his efforts will be directed generally to the development of the business as it is. Mr. Martin is a nephew of Mr. Joseph Bosisto, the Australian pharmacist and legislator, who introduced encalyptus oil into therapeutics.

## Business Changes.

Mr. J. E. SOUTHON, A.P.S, for many years manager to Messrs. Corbyn, Stacey & Co., at 153 Leadenhall Street, has opened a pharmacy at 8 Leadenhall Street.

Mr. T. W. Coslett, who has for the past five years represented Messrs. Wyleys & Co., of Coventry, is now representing Messrs. Corbyn, Stacey & Co., 300 High Holborn, London.

ME3-RS. C. CHANCELLOR & Co., the agents for the "Rising Sun" stove polish and other American specialities, have appointed Mr. G. J. Davidson, of 273 Hawkhill, Dundee, as their representative for that district.

MESSRS. H. SALLE & CIE, wholesale druggists, of Paris, announce that, owing to the destruction by fire of their warehouse in the Rue Barbette, they have provisionally transferred their offices to 11bis Rue Elzévir.

Mr. M. D. Armstrong, who was for many years with J. G. Ingram & Son, the well-known manufacturers of indiarubber goods at Hackney Wick, has transferred his services to the Leyland Rubber Company (Limited), of Leyland, near Preston. He will conduct their London business at their offices, 17 & 18 Basinghall Street, E.C.

## Bankruptcies and Failures.

Re Mrs. Mary Clarke, widow, 9 Queen's Road, Nottingham, lately of 144 Arkwright Street, Nottingham, Ointment Manufacturer.

A FIRST meeting of creditors in this case was held on January 6 at the offices of the Nottingham Official Receiver. The Official Receiver's observations stated that the bankrupt, who filed her own petition, commenced business about three years ago, with a capital of 50l. or 60l. The liabilities are in respect of advertising and printing. There are no assets whatever, and the bankrupt has kept no books of account. An extract from the deficiency account, which had been filed, showed excess of assets over liabilities on December 16, 1892, 16l. 3s. 8d.; deficiency, as per statement of affairs, 74l. 16s. 4d. In reply to the Official Receiver, debtor stated that Mr. Arthur Bailey was no relation, but was a friend who had lent her money to go on advertising after her husband died. Mr. Bailey had lent her two sums of 20l. each, and when she wanted another 50l. she sold him her furniture, making the whole sum 90l.

Re Henry Em. Morton, 81 Finsbury Park Road, N , Patent Medicine Vendor.

THE creditors interested in this failure, reported in our last issue, met on Tuesday last at the London Bankruptcy Court, before Mr. G. W. Chapman, Assistant Receiver. The accounts show total liabilities, 4181. 2s. 8d, and a deficiency of 3981. 2s. 8d. The following are the principal creditors, viz.:—

## Unsecured.

	£	8.	d.	
Alabone, E. W., 12 Highbury Quadrant, N.	 187	0	0	
Barber, G., Furnival's Inn, Holborn	 25	6	0	
Ollard, J., 2 Church Court, Clement's Lane	 103	13	11	

## Partly Secured.

Felce, A., 47 Anuerley Rd., Upper Norwood, chemist 70 0 0 (Security valued at 201.)

No offer was submitted by the debtor, and the estate remains in the hands of the Official Receiver, to be administered in bankruptcy. The debtor was ordered to attend the Court on January 26, for public examination.

## Gazette.

## PARTNERSHIPS DISSOLVED.

Wallis, M. E. A., & Harris, J. E., under the style of Drs. Wallis & Harris, Chiswick, general medical practitioners.

Wilson, A., Smithett, W., & Wilson, S. J., under the style of Wilson, Smithett & Co., Mineing Lane, E.C., produc. brokers.

THE BANKRUPTCY ACTS 1883 AND 1890.

RECEIVING ORDER.

Lamb, George, Kingston-upon-Hull, surgeon.

ADJUDICATION.

Nlxon, Thomas, Reading, surgeon.

Fire At the World's Fair.—It was supposed that he was a madman who proposed that the World's Fair buildings should be removed by fire, for is not "staff" an incombustible material? However, the Casino took fire on Sunday and spread through the Peristyle—as solid and stony looking a structure as can be imagined—destroyed it, and got into the Manufactures Building, where exhibits were lying packed for shipment. The value of the exhibits destroyed probably amounts to \$200,000. The Danish, Spanish, and Austrian exhibits were uninjured, while the British section was very slightly damaged. The French loss is estimated at \$40,000, and that of the Russian exhibitors is small. Looting was general, and does not come in the estimate.

## Trade Motes,

MR. ERNEST CAUDERLIER, of 131 Fenchurch Street, E.C. has added a drug-export department to his business.

MESSRS. C. GROSS & Co., of 9 Mincing Lane, E.C., have been appointed sole agents for Messrs. A. Grill & Co., successors to Geo. Walser & Co., Messina, essential-oil distillers.

MESSRS. PERKEN, SON & RAYMENT inform us that the awards in their 100-guinea photographic competition bave now been declared. Prizes are given to fourteen competi-

To enable their employés to derive the full benefit of the Saturday half-boliday, Messrs. Evans, Sons & Co., Liverpool, have arranged to close their offices, laboratories, and warehouses at 1 P.M. on Saturdays in future.

"QUININE LEMONADE" is the happy idea of the Camwal people, as an aerated beverage to be taken as an "influenza preventive." It is as pleasant as ordinary lemonade, but leaves a slight bitter taste on the palate. The quinine used does not very appreciably affect the cost.

EXTRACT-OF-MEAT COMPANY (LIMITED) announce a half-yearly interim dividend at 5 per cent., the same as last year, being 20s. per share, tax-free, payable on February 15, to the proprietors registered on the company's books on February 8, and to holders of share-warrants to

MESSRS. MAY & BAKER (LIMITED), of Battersez, and Messrs. Dakin Brotbers, of Leadenhall Street, both ask us to contradict a report which has been circulated to the effect that Mr. 5. H. Laseelles, who represents the latter firm in India, is also directly representing Messrs. May & Baker for ebemicals and mercurials. There is no foundation for this report.

MESSRS. AYRTON & SAUNDERS of Liverpool, have introduced a very seasonable and saleable series of chest and lung protectors, the "Norse," which are made of knitted material. This material (fine natural colour lambswool) has practically two surfaces, the outer knitted and the inner fleecy. This combination ensures great warmth, and one feels cosy when wearing such a protector. The firm offer the protectors in the most saleable sizes, and attractively labelled.

A DAINTY and prettily-got-up "Practical Cookery Book" has just been issued by the Liebig Extract-of-meat Company (Limited). It contains some 180 recipes, most of which will well repay a trial. It shows that the Liebig Company's Extract of Meat can be used for an immense variety of dishes. It figures in the recipes for asparagus soup, ox-tail sonp, baked red mullet, mutton pilau, jugged hare, shepherd's pie, dressed vegetable marrow, Parmesan omelette, caper sauce, savoury custard, and aspic jelly. The book can be had on application to the company, at 9 Fenchurch Avenue, London, E.C.

## Deaths.

Brown.--On January 8, James Thomas Brown, F.C.S., eldest son of the late James Brown (of Aldgate), M.P.S. Aged 49.

CLARE.—On December 28, Thomas Clare, eliemist and druggist, of Searborough. Aged 45.

COLLIER.—The death is reported at Melbourne, Australia, of Mr. William James Collier, which took place on November 21, at the early age of 40. He was the second son of the late Mr. Wm. L. Collier, pharmaceutical chemist, of 149 Friar Street, Reading.

FELTON.—On December 30, Thomas Felton, chemist and druggist, of Cowbridge, South Wales. Aged 56.

HICKMAN.—On January 5, Alderman Jas. Frederick Hickman, J.P., chemist and druggist, Market Place, Newbury, aged 83. Mr. Hickman served his apprenticeship in the North of England, and subsequently went to London. | years ago.

In 1838 he purchased the business earried on at Newbury by Mr. Wm. Jackson. In 1843 he became a member of the Town Council, and was four times Mayor of the Borough.

NEAVE.—On January 9, at Upton House, Fordingbridge, Jane, beloved wife of James Reynolds Neave. Aged 62.

THE LATE DR. SPRUCE. - Mr. John R. Jackson, of the Kew Museum, senos us the following note regarding his deceased fellow-seientist:—Richard Spruce, whose death has just been announced, and whose name will always be associated with the introduction of the einehonas into India, was in many ways a remarkable man. Born seventy-seven years ago at Ganthorpe, in the East Riding of Yorkshire, where his father was the village-schoolmaster, young Spruce began at an early age to develop the powers of accurate perception, both of mind and eye. His taste for mathematics led him to the appointment



of mathematical master in St. Peter's College, York. His first botanical paper appeared in the Phytologist in 1841. In 1845 he made a journey to the Pyrenees, and in 1849 he started for South America, in which country almost a life-long residenee was spent. As an illustration of the assiduity with which he prosecuted his study of plants and of his colossal powers of collecting not only the plants themselves for herbarium purposes, but also specimens showing their uses, it may be mentioned that his first collection, and this a very extensive one, reached Kew in the same year that he left England—namely, in December, 1849—and this was followed through consecutive years by others, sometimes two or three consignments in one year, up to 1866. The Kew museum thus became very rich in vegetable products of all kinds from Pará, Santarem, and, indeed, every district into which Spruce penetrated. Nothing escaped his notice in connection with the uses of plants: food-products, native medicines, and manufactures, all received a full share of his attention, in consequence of which a large number of his specimens are of considerable ethnological interest. Another point on which Spiuce may be noted as an exemplary collector was the care with which all his notes were written out in a small, neat, and plain hand, and the great care he always took to record every serap of information referring to any special object

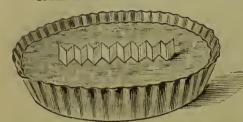
Though Spruce will be best remembered amongst pharmacists for his "Report on the Expedition to Procure Seeds and Plants of the Cinchona succirubra, or Red-back Tree," which was a record of the commission with which he was entrusted by the Secretary of State for India in 1859, he is equally-or, perhaps, better-known amongst systematic and economie botanists for his extended and extensive labours amongst South American plants, as well as for his knowledge of mosses.

Our portrait is reproduced from the latest photograph of the deceased gentleman extant, one taken about twenty-two

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## Editorial Comments.

## POISON-BOTTLES.

THE melancholy death of Professor Tyndall last month, followed as it has been by reports of several other deaths from accident, has naturally called forth many remarks urging that some means should be taken to prevent such catastrophes in the future. "It is time," says the Daily News, "that the Pharmaceutical Society dealt with this very serious matter." The writer asks: "Could not all poisonous compounds be put in bottles of triangular form?" It is not necessary to multiply quotations. This one is typical of a great number of suggestions that have been made by journalists and correspondents of newspapers in reference to one or other of the accidents that have recently occurred.

It is not, we think, right that no notice should be taken of these remarks. The Pharmaceutical Society may find it difficult to offer any useful observations, but it is at least desirable that they should deal with the subject, if it were only to point out the difficulties attending it—difficulties which are not so apparent to the general public as to the dispenser.

It may be of interest, in connection with this subject, to relate briefly what occurred in respect of poison-bottles when the Pharmacy Act was passing through Parliament. The discussions will be found more fully given in "The Pharmacy and Poison Laws of the United Kingdom," published by us.

In the Government and other Bills which were introduced before that which became the Pharmacy Act of 1868, the poison-bottle question had been soveral times mooted. In a Bill introduced in 1857 it was provided that all solid poisons were to be wrapped in tinfoil as well as in paper, and liquid ones were to have the word "poison" moulded on the bottle. Similar proposals were made In 1863 Lord in a Bill introduced the next year. Raynham brought in a Bill stipulating simply that substances " of a poisonous nature, or calculated to injure or endanger human health or life if taken internally," should only be sold in hexagonal bottles fluted on five sides. When the Pharmacy Bill was passing through Committee of the House of Lords, in 1868, Lord Redesdale gave notice of a clause, which he moved on the report-stage, providing that it should not be lawful to sell any poison in a bottle unless such bottle be of an angular form, corrugated, and opaque, to be thenceforth known and described as a "poisonbottle"; and that it should not be lawful to sell any preparation not poisonous in any such bottle. The Lord Chancellor asked how were compound medicines containing poisons to be treated, and Lords Salisbury and Granville also opposed the proposal. It was not pushed to a division then, but was again raised on the third reading, Lord Redesdale then expressing his willingness to leave to the Pharmaceutical Society the decision as to the particular shape of bottle which should be adopted. Lord Salisbury opposed the proposal with some energy. He first supposed a medicine containing a poison being wanted in the night, but not being obtainable because the chemist had run out of stock of his poison-bottles. Then he said he objected to the whole principle of such legislation. They had never acted, he said, upon the principle of protecting sensible people from possible dangers merely because foolish people might have it in their power to injure themselves. Lord Salisbury added: -

Because somebody might be foolish enough to get up in the middle of the night and, without taking the trouble to strike a light, might drink off the contents of a bottle, therefore the noble Lord proposed to introduce entirely new restraints affecting a whole profession. This was a principle of legislation not unknown to foreign countries, where Governments were very fond of protecting people against the consequences of their own acts; but it was totally opposed to the habits of this country.

Lord Granville then read a letter he had received from a gentleman of great practical experience, who we believe was the late Mr. Sandford, who urged that most chemists did use distinctive bottles for dangerous drugs, and that it was safer to leave it to their discretion than to define exactly when such bottles must, or when they must not, be used. The Duke of Marlborough, the Earl of Kimberley and others, spoke against the clause, but it appeared that Lord Redesdale's motion commanded a good deal of silent sympathy, for it was only defeated by 45 votes to 39.

It would be an impossible task to draft any regulation which would cover all cases. There are infinite gradations in the poisonous nature of medicines, but nobody would advocate an infinite variety of bottles to meet such cases. Moreover, the public could never be educated to distinguish between three or four varieties. But suppose one general poison-bottle should be adopted there would be no question about the necessity of using such when an aconite liniment was dispensed, but there would be continual doubts in many of the other cases from which death is occasioned. For example, would it have been used in the case of the syrup of chloral from which Professor Tyndall died? Last week we reported an accidental death from camplior-

ated oil: would it have been used for that? Professor Tyndall's chloral was dispensed so as to be taken in tenspoonful doses. Suppose it had been diluted so that it was taken' in tablespoonful doses: would the poison-bottle have been necessary then? Lord Redesdale saw the necessity of providing not only that poisons should be sold in his fluted bottle, but also of stipulating that no other article should be sold in such bottles. But how would be have prevented the possessor of such an empty bottle from keeping gin in it or using it for the baby's milk! These are difficulties obvious, of course, to every chemist, but which do not occur to jurymen or to the public generally They apply of course to corks, labels, and other devices, as well as to bottles. The conclusion from them, however, is not that On the contrary, a great deal nothing should be done. should be done. The chemist should use his trained intelligence every time he sends out any medicine with which it may be possible for an accident to occur. He should certainly have very special bottles for dangerous liniments, especially when these are being used at the same time that a medicine is being taken, and he should take care to impress upon attendants whenever requisite the necessity for strict caution. This sort of thing is done thousands of times daily, and nobody knows how many lives may be saved by the adoption of little precautions. We hear of it promptly enough when by the momentary neglect of one a life is sacrificed.

## THE STANDARD OF WORTH.

WHILE the old year was drawing to its end two men of science closed their life's record. John Tyndall and Robert Bentley were widely different characters, and their positions in the roll of fame may be greatly apart, but they were at least alike in one respect-neither laid claims to high attainment in original research. It has, indeed, been said of both of them that they were not gifted in that direction. We do not dispute the statement, although there are grounds for questioning its strict accuracy. But it is almost necessary before the name of Robert Bentley disappears from current literature to dispute the correctness of the standard of worth which is growing upon us, and by which he is being judged. We have felt regret that some writers of obituary notices of the late emeritus professor referred to him in a halfapologetic way as "one of the old school" who had done little in original research, but was a competent "compiler." On Wednesday Mr. Carteighe referred more politely, and in fully affectionate terms, to absence of original research from Professor Bentley's work.

Whatever the future may hold in store for us we cannot overlook the fact that at present science includes many men who are of the old school, and it is they mainly whom we have to judge as they are called to their account. It. seems to us that we must not judge such men according to the number of original researches which they have conducted, or the papers which they have published, but by the manner in which they have performed their duties in the sphere of their influence. Robert Bentley was a teacher of botany, appointed in the early history of a society, which has since become influential, to instil into the minds of aspiring young pharmacists a knowledge of the principles of the science which he professed, and its applications to pharmacognosy. This work, it is universally acknowledged, he did well, and through his influence many connected with medicine and pharmacy have distinguished themselves in the branches of knowledge which he early taught them. His task was to prepare them for their examinations, but he made many investigators, or, to use a happier word, specialists. No excuse is required for Robert Bentley hecause he did not teach biology, or specialise on the minute structure of drugs. He would not have been true to his appointment had he done so.

But apart from his work in the School of Pharmaey, it seems to us that Bentley was one of a class of men for whom the world is not sufficiently appreciative. He was a gifted epitomist. His accurate knowledge of his subjects enabled him to write text-hooks which have been of immense benefit to students. His books are remarkably free from inaccuracies, wonderfully lucid, and few who have used them have less affection for the hooks than the students who came under his influence had for the author. Can we calculate the good the man has done in this way? It is impossible. But how easy is it sometimes to sum up the henefit accruing to humanity from the original researches of an investigator! We do not cavil at original research, for knowledge cannot progress without it. It is, however, a branch of the service which a man renders to his fellows, and when one goes who has done little or none of it, we must not debit his worth with a minus quantity on that account, but should regard the man as he was, and judge him by his whole influence for good. In this light we should have regretted any disturhance which would have made Robert Bentley's life other than it was. He was a true teacher, and we fear, had he heen drawn into the eoils of original research, we should have lost some of the charm which floats round his name.

## LABOUR IN CHEMICAL WORKS.

On another page we print the new special regulations for chemical-factories which have been approved by the Home Secretary, upon the recommendation of a Commission charged with an investigation of the conditions of labour in chemical-works. The Commission consisted of five experts, none of whom can he suspected of harbouring any of the Socialistic proclivities of which all persons whose names are mentioned in connection with labour questions are suspected, rather indiscriminately, in certain quarters. The Commissioners were Messrs. A. E. Fletcher, the chief inspector under the Alkali Act; William Dawkins Cramp and H. S. Richmond, inspectors of factories; P. A. Simpson, professor of medical jurisprudence at Glasgow University; and Dr. O'Neill, certifying surgeon of the Widnes district. These gentlemen examined a large number of witnesses engaged in labour at various chemical factories. also visited the chief alkali and chemical works, and conferred with the proprietors of these works. Many of the latter appear to have given the Com. missioners generous and enlightened assistance in their duties, the names of Messrs. Brunner, Mond & Co., the United Alkali Co., the Oldbury Alkali Co, as well as of the London Chamber of Commerce being specially mentioned in the report as deserving of thanks for assistance rendered. The most important result of the Commissioners' investigation is their strong recommendation of the adoption of the eight-hours day in the alkali-trade, and it is upon that recommendation that Mr. Asquith based the reply to Mr. John Burns's question which we published in our issue of last week, and in which he promises to bring in a Bill for a compulsory leight-hours day in works which have not voluntarily adopted it by next spring. As eight-hours shifts already prevail throughout Messrs. Brunner, Mond & Co's works and have been partially adopted with success by the United Alkali Company, there is strong presumptive evidence that they will also answer well in other works if only the employers show a reasonable disposition to give the experiment a fair chance, and the workers have the good sense to co-operate loyally in the same object. It is certainly significant that in the summer quarter of 1889, before the adoption of the eight-hours shift, Messrs. Brunner, Mond & Co.'s books showed that 7.1 per cent. of their men were in receipt of sick-pay, while in the corresponding quarter of 1893, after the eight-hours day had been adopted, the percentage was only 5.1; while the percentage of men who received medical aid was reduced from 1012 in 1889 to 51 per cent. in 1893.

That the employers in the alkali-trade are themselves hroadly conscious that the present conditions of labour in their factories are unsatisfactory in many respects is shown by the fact that they have expressed their agreement with the new rules. As regards the manufacture of bleachingpowder, the Commissioners strongly indicate their preference for the "Deaeon" ehambers—in which the lime is placed in thin layers on superposed trays, saturated with dilute (5 per cent) chlorine gas, and the hleaching-powder shot through hoppers into tarrels-over the "Weldon" ehambers, in which a thick layer of lime spread on the floor is saturated with strong chlorine gas, and the packing has to be carried on inside the chambers instead of in the open air. Another process now used in Germany; and the automatic continuous-producing chamber lately invented and patented in this country, appear to offer advantages over both the systems now in use in England, and a plant resembling the "Hasenclever" process is already in course of erection at Messrs. Brunner, Mond & Co.'s.

So much for the alkali-trades. The new rules, however, are to apply not only to that large industry, but also to the individually smaller, hut numerically much larger, works in which the multifarious other chemical-manufacturing processes of the country are carried on. It is notorious that among the members of the Chemical Section of the London Chamber of Commerce there is a strong feeling that some of the new rules are quite unsuitable to the smaller chemical industry, and that their enforcement will severely handicap the proprietors of such works. Beyond a letter from Mr. David Howard, strongly denouncing the proposed rules, which was read at a recent meeting of the ('hamber, no serious attempt has yet been made by the Chemical Section of the Chamber as a hody to prove that the new rules will he injurious to the smaller chemical industry of this country; hut a meeting of the Section will shortly be held, and the members who take a strong view of opposition to the rules may he trusted on that occasion to make the best of their ease. Under the existing Factory Act, a twenty-one days' period is provided in which objections to the new rules may be lodged. The Hom2 Office will be bound to consider such objections with all the respect and care due to the powerful organisation from which they emanate. But, looking at the question from a broadly political and industrial standpoint, we feel certain that the Chamber will be well advised to move along the line of least resistance, and to meet any rules which may be objectionable in a spirit of preparedness to conciliation rather than in an attitude of non possumus. Opportunism may not be an heroic policy, but in a question such as that now at issue it is an eminently desirable one for the chemical manufacturers to adopt. It would be folly to ignore the forces at the back of the framers of the new rules. Reasonableness and readiness to conciliate have always been considered eminently British characteristics, and it is to be hoped that they will not he found wanting in the action which is sure to follow the publication of the new regulations.

## THE MANCHESTER SHIP-CANAL AND THE CHEMICAL TRADE.

Manchester people are looking with what seems reasonable expectation to the day when their city shall depose Liver-

pool from her rank as a produce-trade centre. Liverpool at present imports considerable quantities of drugs and drysalteries, chiefly from South America and West Africa, and it may well be that in time to come a portion or the importtrade of these goods, for consumption in the district of which Manchester is the centre, will be directed to the new port. The first shipment of indigo imported into Manchester hy the new canal, consisting of ahout 20 tons, arrived by the Erith on January 2. At the meeting of the Manchester Section of the Society of Chemical Industry on Friday last, a motion congratulating the directors of the canal upon its completion was adopted. One of the members referred to the ignorance which had hitherto prevailed amongst railway companies and other carriers of goods with regard to chemicals, and to their failure to realise the magnitude of the chemical industries of this country. The quantity of iron ore, sulphur, and the various forms of alkali and other heavy chemicals that come into the district would run into hundreds of thousands of tons per annum. The Chemical Section of the Manchester Chamber of Commerce, it was stated, intend to sec that the Canal Company keeps the freight-rates for chemicals at a level satisfactory to the traders. Great complaints have always been made of the freights on chemicals in Liverpool. The moment goods are called chemicals, said one of the speakers at the meeting, the Liverpool shippers take fright, and will only take them on deck and at owners' risk. In this way the chemical industry of the country was carried on at a great disadvantage. In the case of places like Antwerp, Rotterdam, and Havre, there was no difficulty in shipping any kind of chemicals, and the charges were far more reasonable than at Liverpool or any place on the east coast. And there were some curious inequalities in the charges. Copperas, for instance, was charged differently from sulphate of iron, which was exactly the same thing. All this was due to the ignorance that prevailed with regard to chemicals.

## THE TYSON CURE.

It will be seen from our news section that the smooth sailing of Dr. Tyson's agent in Dundee has been somewhat disturbed by the report from THE CHEMIST AND DRUGGIST of Australasia. On May 4 last year the Pharmaceutical Society of Victoria proceeded against Tyson's secretary at Melbourne for a breach of the Sale of Poisons Act, in respect to a sale of the cure. Mr. Cuthbert R. Blackett, the Government analyst and a competent chemist, was the witness called to prove that the "cure" was a poison. By analysis he had obtained 0.11 per cent. of strychnine and brucine from the "cure," and he did not hesitate to say that nux vomica was the active constituent of the "cure." Conviction followed. The Dundee agent is now trying to discount Mr. Blackett's results, but it will be exceedingly difficult for him to convince anyone who knows the extremely characteristic reactions of strychnine that Mr. Blackett erred. government analyst's reputation, his long experience, and the gravity of the case in which he was engaged assure us of the integrity of his results.

## HOURS OF CLOSING.

It is impossible to complain of the decision of the Barnsley magistrates in the case of the chemist who they held was infringing the excise law hy keeping open his shop, in which wines were exposed for sale, after 11 P.M., as reported last week. No shop of any sort ought to be open after 11 P.M., but this is sentiment, not law. If chemists or grocers who hold wine licences, however, wish to keep open for other business beyond that hour, they must be careful not only not to sell, but also not to show any wines in their shops or shop windows. It may be useful to note, for it was not mentioned in the case, that in rural districts where the hour of closing is 10 P.M., this hour is also the limit as regards selling wines or exposing wines for sale by holders of off-

## - A NEW READING OF THE PHARMACY ACT.

Madame Ruppert's devoted efforts to promote beauty in this common-place world meet with hut scant appreciation from the administrators of the poison laws of the United Kingdom. The Pharmaceutical Society of Ireland seem to he particularly earnest in their determination to cripple if not to suppress her mission, and last week they had the satisfaction of getting the lady herself on their side of the Irish Channel, in answer to their allegations. Whether the half-guinea which Mr. Ferrall invested in the bottle of her skin tonic will be returned with usury, or will have to he sacrificed in company with some others, is a question which is still trembling in the balance. Mr. Swifte, the Dublin Magistrate, has stated that he finds these Pharmacy Act cases particularly interesting, and he may be relied upon to give a careful judgment on the nice point which has been raised before him. In the case, however, decided on Tuesday last in the Westminster County Court hy Judge Lumley Smith, we bave no hesitation in saying that, if our report accurtely represents the Judge's observations, a startling new reading of pharmacy law has been sprung upon us. Madame Ruppert sued another lady who had bought her goods to sell them again in Bournemouth, and a part of the defence was that, certain of the preparations containing a scheduled poison, Madame Ruppert could not legally sell them, and, therefore, could not now recover for them. Madame Ruppert's solicitor quoted section 16 of the Pharmacy Act, which expressly exempts "the business of wholesale dealers in supplying poisons in the ordinary course of wholesale dealing"; but the Judge took the astonishing view that this did not apply to such transactions as those between Madame Ruppert and Mrs. Nives. No one doubts that the transaction was a bona-fide wholesale one, but Judge Lumley Smith, Q.C., considers that the wholesale dealings exempted in the Act were only those direct with chemists. This would be a construction of the Pharmacy Act of extraordinary value to chemists if it were a sound one, but we cannot believe that there is any hope of its being maintained. There is no such limitation in the statute as the Judge reads into it, nor anything to support Mr. Smiths' view, which is the more extraordinary as it comes from a Judge who, in his counsel days, always with marked ability, represented the Pharmaceutical Society in many of their principal actions.

## NEW BOOKS.

THE following new books of interest to readers of THE CHEMIST AND DRUGGIST have been published recently. [Mention of a publication in this list does not preclude a subsequent literary notice of the book in another part of the

Smith, James Walter, LL D .- The Law of Joint-stock Companies. New and revised edition. Wilson's Legal Handy Book Series. (Efflugham Wilson

Kneipp, Sebastian .- Thus Shall Thou Live. Hints and advice for the healthy and the sick on a simple and rational mode of life and a natural method of cure. Translated from the 19th German edition. (II. Grevel.)

Bartholow, R.—A Practical Treatise on Materia Medica and Therapeutics Eighth edition, revised and enlarged, 8vo. 21s. (H. K. Lewis.)

Brown, A. M.—The Animal Atkaloids. Cadaveric and Vital. With introduction by Professor Armand Gautier. Third edition. 8vo, 7s. 6d-(Kempton.)

Morten (Honnor).-The Nurse's Dictionary of Medical Terms and Nursing

Treatment, Second edition. 32mo. 24. (Selentific Press.)
Phillips, L.—Medicated Baths in the Treatment of Skin Diseases. 12mo. 4s. 6d. (Cornish, Birmingham.)

White, T. C .- The Microscope and How to Use it. A handbook for beginners. New and revised edition. Hinstrated with photo-micrographs by the author. Post 8vo. 2s. (Sutton.)

## Legal Reports.

RUPPERT'S SKIN-TONIC.—ACTION IN DUBLIN.

ON January 5, in the Southern Divisional Dublin Police Court, before Mr. Swifte, B.L., Madame Anna Ruppert appeared to answer a summons at the suit of the Pharmaceutical Society of Ireland, charging her with having, on September 5, 1893, at 74 Grafton Street, Dublin, kept open sliop for retailing and dispensing poisons within the meaning of the 33rd and 34th Victoria, chap. 26, and sold a poison within the meaning of that Act—viz., "Ruppert's skin-tonic" to Mr. Arthur Ferrall, the Registrar of the Pharmaceutical Society of Ireland, contrary to section 30 of the Irish Pharmacy Act, 1875, the defendant not being a person duly qualified to do so.

Mr. Robert K. Clay, solicitor, appeared for the prosecution; and Mr. James Campbell, Q.C., for the defendant, who

was in attendance.

Mr. Arthur Ferrall, Registrar of the Society, examined by Mr. Clay: I purchased the bottle produced at Mrs. Ruppert's establishment in Grafton Street on September 5. I have a receipt for 10s. 6d., the price of it. I gave the bottle as I got it to Professor Tichborne.

Cross-examined by Mr. Walker, solicitor (in the absence of Mr. Campbell, Q.C.): Two ladies in court were pointed out to witness and he identified one as the lady from whom he got the bottle. It was enclosed in a wrapper when he got it. He handed it unopened to Professor Tichborne.

At the time you bought this, had you any other bottle of

skin-tonic in your possession?

Mr. Clay objected.

Mr. Walker: I want to establish that this was the bottle actually bought.

Mr. Swifte: You think he might have mixed one bottle

with another?

The Witness: No, your Worship, I had not.

Do you remember any conversation taking place between you and the lady you bought the bottle from?—Yes.

Well, tell us exactly what passed. The Witness: Shall I do so, your Worship?

Mr. Clay: I don't see how you can make this evidence.

Mr. Swifte: I think it is a fair question.

The Witness: She gave me the bottle of skin-tonic and I gave her 10s. 6d. She said it was the price. I asked her for

a receipt and she gave it to me.

Anything else?—I don't know, your Worship, whether I

am expected to give a report of everything she said.

Mr. Walker: Tell us all that happened.

The Witness: She said, your Worship, that she was a little afraid about selling this medicine, because she had been prosecuted some time before by the Pharmaceutical Society; but that she had been assured by the head office in London that it contained no poison.

That is, the bottle that she was selling you?—Yes. I asked

her to give me the right medicine.

Can you by no possibility be mistaken that this is the actual bottle you bought?—No doubt at all. I handed it to Professor Tichborne on the day I bought it—September 5.

Mr. Swifte: This is January 5. Why was not this prose-

cution instituted before?

Mr. Clay: There was a correspondence.
Mr. Walker: There was no correspondence with the defendant, because she only got the summons the day before yesterday, and I asked for an adjournment and could not get it. It is the usual practice of the Pharmaceutical Society to rush these things.

Mr. Clay: I beg to deny that. I have her letter of October

20, in which she makes an ad miscricordiam case.

Professor Tichborne, examined by Mr. Clay: I got this bottle from Mr. Ferrall on September 5. I dated it with my own hand. So far as the label is concerned, it is in the same state now as when I got it. I don't think there was any outside wrapper on it. There is no notice of "Poison" on the bottle. I analysed the contents and found about 61 grains of corrosive sublimate in the bottle.

Mr. Walker: We admit that, if there is this substance in the bottle, we have no defence.

Mr. Clay: That's my case, then.

Professor Tichborne, in reply to Mr. Swifte, said that 3 grains of corrosive sublimate had been known to poison an adult, and & grain to poison a child.

Cross-examined by Mr. Walker: You are described here as "Professor" Tichborne; will you tell us of what you are professor? - I am a Professor in the School of Pharmacy of the Pharmaceutical Society

Mr. Clay: Stop, Mr. Walker; you are only addressing the

Court by courtesy.

Mr. Walker: I appear here as a sworn solicitor.

The Witness, in reply to the Bench, said: I am an ex-Professor of Chemistry in Cacrmichael College, which is now closed. The Pharmaceutical Society's School was established with the sanction of the Privy Council.

Mr. Walker: Do you say that your title of "professor" is established by law?

Witness: I don't know that there is any title of "professor." I was appointed by a resolution of the Council of the Society, which was sanctioned by the Privy Council.

Mr. Clay: To save time I advise the professor to drop that

title and stand here as an analytical chemist.

Professor Tichborne, in reply to further questions, added: l have an honorary degree of LL.D. from Richmond University in the United States. Some years ago 1 got three honorary degrees from America.

Mr. Swifte: Tell us your qualifications as an analyst.

The Witness: I am a Diplomate in Public Health of the Royal College of Surgeons in Ireland. I am a Licentiate of the College of Surgeons, a Licentiate of the Apothecaries' Hall, and Public Analyst to the county of Longford; and I have had thirty years' experience, having been educated under Professor Rothman.

To Mr. Walker: I made a quantitative, as well as a qualitative, analysis of the contents of the bottle.

Are you in a position to tell us every ingredient in the

bottle l-Oh, I don't say that.

Did you not make a qualitative analysis? - Of the ingredient which was essential; and having done that we estimate the amount of the substance.

Have you ever made mistakes?—No, I don't think I have,

but that is my own opinion.

Do you remember making an analysis of whisky for the Royal Irish Constabulary in a case in which they prosecuted a Mr. Philip M. O'Reilly some time about September or October, 1893?—I think I recollect that caso. I am quite sure I recollect it.

Was the correctness of your analysis disputed in any particular case in the county of Longford during the past

year?—Oh, it has been disputed four or five times

Tell us about O'Reilly's case ?—I sent a certificate that the whisky was up to strength, but I also pointed out that it contained oxide of iron, and I stated that it was not of the nature and character that good whisky ought to be. I believe the whisky was sent to the Principal of the Laboratory at Somerset House, and the statement that it contained

iron was endorsed by him.

To Mr. Campbell, Q.C. (taking up the cross-examination) My analysis took about two days, or perhaps three, but I did not send in my report until September 21. I remember a lady calling on me with a bottle of this fluid. I think that was about October 10, so far as my memory goes. I retained half the contents of the bottle and gave her back the remainder. She gave her name to me as Miss Maud Stewart. She wanted me to make an analysis of the contents of the bottle. I did not particularly care to do so at first, but after having consulted the President of the Society, I made the analysis and was paid for doing so; but I pointed out to her that it would be of very little use to her in the case.

Mr. Campbell, Q.C.: We will see about that. There was no

sublimate in the contents? Mr. ('lay: I object to that. Why give evidence about a

bottle that we know nothing about?

The Witness (to Mr. Campbell): There was no sublimate in the bottle. It was a perfectly harmless compound, and I gave a certificate to that effect. The bottle the lady brought me was identical, so far as outward appearance was concerned, with the one now produced, but the contents had a very different smell.

Re-examined by Mr. Clay: My statement about the whisky

was confirmed at Somerset House.

Professor Tichborne then handed to Mr. Swifte two small

bottles. The contents of one these, he said, acting on copper-foil, showed a deposit of mercury. This was from the bottle bought on September 5. In the ease of the other bottle there was no such deposit.

Mr. Ferrall, in reply to Mr. Campbell, Q.C., said that at the time he purchased the bottle which was the subject of the present prosecution he had not in his possession the one on which the previous prosecution was founded.

Mr. Campbell, Q.C., in opening the case for the defence, said that gross injustice had been done to the defendant by the delay of four months in bringing the prosecution.

Mr. Clay: There is some explanation of it in her letter of October 20.

Mr. Swifte: It explains some of it.

Mr. Campbell, Q.C., said it would have been open to him to show that the other ingredients contained in the bottle sold on September 5 rendered the corrosive sublimate practically innocuous. Professor Tichborne had given them no account of that, because he did not analyse any of the other contents of the bottle. But as he (Mr. Campbell) considered that he had a perfect defence on other grounds, be would not trouble the Court with that subject. Immediately after the prosecution last August, when Madame Ruppert found that she had been infringing the Act, she scut instructions to all her branch establishments to sell no more of what they had then in stock of the skin-tonic; and before September 5 she sent to the lady in ebarge of her Grafton Street establishment a large consignment of the new preparation, which Professor Tichborne had found to be perfectly innocuous. And when Mr. Ferrall, a respectable gentleman, whose evidence he did not impugn in any way, came on September 5 the lady tried to prevent him from purchasing the bottle; and—whether she made a mistake or not-she was under the impression and honestly believed that it was a bottle of the new stuff that she gave him. If these facts should be proved to the satisfaction of the Court. he submitted that Madame Ruppert could not be made responsible in the present prosecution.

Miss Mand Stewart, examined by Mr. Campbell, said she

was manageress for Madame Ruppert at her branch establishment in Grafton Street. The first she knew of the prosecution last August was through seeing the result of it in the papers. she at once communicated with Madame Ruppert in London, and both before and after September 5 she had instructions from her not to sell the old tonic, but to send back what she had in stock. About ten days or a fortnight before the gentleman came in September, she packed all the bottles of the old tonic in a back room. After that Madamc Ruppert sent a quantity of the new tonic. So far as she know, there was none of the old stuff in the shop for sale when Mr.

Ferrall came on September 5.

Mr. Swifte: Have you the invoice that came with the new stock ?

The Witness: I have not.

Mr. Clay: Does this affect the question of having sold a

bottle in which we say there was poison?

Mr. Swifte: I think it has a very great bearing on it. It tends to show that it was by mistake that one of the old bottles was sold.

Mr. Clay: The fact of the sale is sufficient for my purpose.

Mr. Campbell, Q.C.: That is a question of law.

Examination of the witness continued: I remember the gentleman, whose name I did not then know, coming on September 5. He asked for a bottle of the skin-tonic, and I handed it to him. I said, "May I ask what you want this for?" He said, "What has that to do with you?" I said, "Oh, everything, because the sale is stopped owing to its containing a portion of poison. The Pharmaceutical Society brought an action against Mrs. Ruppert, and since then I have avoided selling the tonic at all." The bottle I brought to Professor Tichborne was taken out of the consignment of new stuff sent to me. That consignment was in hand for sale before September 5, continued the witness, and she had no doubt she had positive directions from Madame Ruppert, before September 5, to withdraw the old stuff from salc. She was positively under the honest belief when she sold the bottle that it was a bottle of the new stuff.

Cross-examined by Mr. Clay: Were the instructions given to you in writing not to sell any more of the old tonic?-

They were.

Where is the letter?-I am not sure, but I think I have I have not got it with mc.

Mr. Campbell, Q.C.: I only got my instructions within the last half-hour.

Mr. Swifte: Wc must have the letter.

Cross-examination continued: Why did you sell the bottle with the poison in it?—I don't believe I did sell it. I was so nervous that I would not sell any bottle until I had a guarantec.

Mr. Swifte: From whom?

The Witness: From Madamc Ruppert.

Mr. Clay: Do you mean to swear that there was no poison in this particular bottle sold by you on that day?—I sold it with the understanding that there was none in it, but I did not see the contents. I never had anything to do with the compounding of the bottle.

But this is one of the bottles that you put into the back room ?-No, it is not; because I had sent them away at that

Prior to the 5th, had you sent back the old bottles?—I had.

Have you the invoice of them !- They have it at the head

Had you any receipt for those bottles sent back before the

5th !- I had on August 29. I ask that it be produced. (To Witness) If you sent all

the poisonous bottles back prior to the 5th, how came it that you sold one with poison in it to Mr. Ferrall?—I don't know.

Madame Ruppert bas been very ill ?-Very.

And only recovered within the last fortnight?—A little

Practically, from the time of the first prosecution, she has been ill until a fortnight or three weeks ago !- So ill that she was not able to walk.

The old bottle has a different-coloured label from the new?—Not to my knowledge.

Don't you see that the new bottle is pinkish?—If it were put in the sun, it would become the same as the old.

How long have you been in Madame Ruppert's employment?—A year and four months.

The witness identified the bottle she brought to Professor Tichborne.

Mr. Swifte said there did not seem to be much difference between the bottles.

In reply to Mr. Clay, the witness said the new bottle smelled as if it were scented.

To Mr. Campbell, Q.C.: The bottle I brought to Professor Tichborne for analysis was out of the new stock. I most positively believed that the bottle I sold to Mr. Ferrall was out of that new stock.

Mr. Clay: Then why did you say to Mr. Ferrall that you were afraid to sell it?—Because I had received intimation that it required a patent-label, and I was in correspondence with the head office at that time.

Mr. Clay: It was not a question of patent, but of poison.

Mr. Swifte: It is a fair answer to your question. She might have been prosecuted by the Revenuc authorities as well as the Pharmaceutical Society.

Mr. Clay (to Witness): Was the skin-tonic the only thing you were selling?—Not at all. There are numbers of other things-hand-lotion, hair-tonic-but nothing for the skin except the skin-tonie.

Madame Anna Ruppert (examined by Mr. Campbell, Q.C.): I am the inventor of the tonic in question. Prior to August last there was a certain proportion of corrosive sublimate in it. It is sixteen years since I began to study. I have been twelve years selling these things. I have an establishment in New York, another in London, and branch establishments in different places. At the time I heard of the conviction last August I was confined to my house.

After that, as the result of that conviction, did you make any change in the composition of this tonic?-I did.

Madame Ruppert then supported the evidence already given. She said the preparation was all made under her superintendence in London. If Miss Stewart sold any of the old tonic on September 5 it was contrary to her directions.

Mr. Swifte (to Counsel): Do you dispute the accuracy of Professor Tichborne's analysis, or is it your case that if one of the old bottles was sold it was a mistake?

Mr. Campbell said he never made charges against professional men if it were not necessary for his case, but he wrged that if the Magistrate came to the conclusion that his analysis was to be relied on, and that the bottle he analysed was the one got on September 5, it could only have been given to him in mistake, and that the defendant was not

responsible for that mistake.

Madame Ruppert, cross-examined by Mr. Clay, said she studied in St. Louis, Missouri, under a physician. Her factory was at 89 Regent Street, London. Nobody was preparing the tonic while she was away. While she was ill she. was able to superintend the manufacture in her house. She had never been warned out of Germany or any other European States for selling these preparations. Asked to explain how it was that on the new bottles the label being different and at the bottom there heing a brand "Manufactured in Germany," her assistant should have sold a bottle without that brand, the witness said a great many of her bottles were manufactured in Germany. The factory in England could not supply her with bottles fast enough.

Is any person assisting you to defend this case, or are you

defending it at your own expense?

Mr. Campbell, Q.C.: Don't answer that.

Witness: Certainly.

Mr. Campbell, Q.C.: She has answered the question, but it ought never to have been asked. It has nothing to do with the mcrits of the case.

Professor Lapper, Professor in the Royal College of Surgeons, and professional analyst, said a bottle was brought to him by Madame Ruppert the previous evening. He tested

it, and found no sign of corrosive sublimate in it.

Mr. Campbell, Q.C., said that was his case. The letters which had been mentioned would be produced; and assuming that they bore out the evidence given as to the withdrawal from sale of the old bottles, he submitted that his client could not be convicted unless the Court came to the conclusion that the new consignment included a bottle or bottles that had poisonous stuff in them. This was a criminal prosecution, and the onus of proving the charge lay on the prosecution. cutors. The evidence of the lady herself showed that she desired to obey the law, and directed all the old stuff to be withdrawn, and sent a consignment of newly-manufactured tonic which contained no corrosive sublimate. supposing that one of the old bottles remained on the shelf and caused the lady in Grafton Street to make a mistake on September 5, how could Madame Ruppert be convicted for that? Could she be made either civilly or criminally liable!

Mr Clay, in reply, submitted that the keeping open shop for the sale of this poison by the defendant, and also the actual sale, had been proved. If any person had been killed or injured by it, it would be no answer for the lady to say that she gave her servant directions not to do a certain thing and that the servant did it. The 30th section of the Pharmacy Act enacted that any unqualified person keeping open shop for the sale of poisons should be fined 5*l*.

Mr. Swifte then adjourned the case until the following day (Saturday), when Mr. Campbell said he would hand in the letters and documents that had been called for by the

The case was resumed on Saturday, when Mr. Campbell handed four letters and an invoice to the Magistrate. Counsel said his solicitor had shown the letters to Mr. Clay that

Mr. Clay asked for the letter of September 6. He wanted

to call the attention of the Court to it,

Mr. Campbell said these letters were all got out on crossexamination. He had proved affirmatively that his elient did not live where the thing was sold, and that it was sold without her knowledge and consent.

Mr. Clay: The letter of September 6 proves that she had

not sent them all back.

Mr. Campbell, Q.C.: I admit that. That's what caused the mistake.

Mr. Clay: She swore that she sent them all back, and that she had a receipt from the carrier. No receipt from the

carrier has been produced.

Mr. Campbell, Q.C.: She never stated that she had a receipt from a carrier. She said she had an invoice of the new consignment.

Mr. Clay: I asked a question about an invoice, and either made good service under the Act-

you or Mr. Walker laughed at me, saying there could be no invoice of goods going back; and then it was stated that it was a receipt.

Mr. Clay then read the following passage from Madame Ruppert's letter of September 6 to Miss Stewart:—"With regard to the other matter contained in your letter, I must remind you that you have been distinctly warned to sell nothing but the new tonic that was sent to you, and put away or send back all the old tonic; at any rate, to have none in view." In order to show bona fides, we want the receipt for any bottles sent back, for at present there is no evidence of any having been sent back. In this letter the lady tells her to keep them out of view.

Mr. Campbell, Q C.: My friend has wisely abstained from calling attention to the earlier letters. They bear out every scrap of evidence given by Miss Stewart and Madame Ruppert. On July 27, the day after Madame Ruppert received notice that the first summons had been served, she wrote to Miss Stewart: "Don't be uneasy about this prosccution. There has been committed a technical breach of the law, because, as I understand the law now, if there is any element of poison in the tonic, no matter how small, it is an offence under the Act. I was not aware of it, but I will keep you safe. Appear before the Magistrate and make a truthful plain statement that you were selling in ignorance, and he probably will impose the smallest fine the law allows. I will pay that, and I will keep you from such danger in future, because I have prepared and am sending you for sale a new tonic which the law cannot touch." On the 28th she writes:— "I have sent you by this day's goods-train a consignment of the new tonic. Remove the old from sale; sell no more of it.' On August 18 she writes another letter bearing out the others. Ha ing received notice from the manageress that the inspector had been there, she writes on September 6.

Mr. Clay: Her partner. She gets 33<sup>1</sup><sub>2</sub> per cent. of the profits.

The letter proves it.

Mr. Campbell, Q.C.: I ask you to read the letter of September 6 in conjunction with the others; they prove to demonstration that every word the two ladies swore in the box is perfectly true.

Mr. Swifte: I don't quite like that expression that Mr. Clay read ont of the letter about not submitting any of these

Mr. Campbell, Q.C.: It is as clear as daylight—not to have them in view for sale. The construction suggested by my friend is—"keep it in some secret place." I ask you whether the fair construction of the letter is not that she was distinctly warned to sell nothing but the new tonic, and to put away or send back all the old. Counsel read in continuation: - "You had bett-r send me a bottle of what the inspector took, and I will see what it is made or. In the event of any action being taken in Dublin again, I must tell you that I cannot hold myself responsible or render you any assistance. I have done all in my power to put things straight by giving you full directions how to act, and you have seemingly failed to follow my instructions. As soon as I found out the necessity for affixing stamps 1 told you of it, and sent you stamps. These should have been affixed, in spite of what you say, and as I have a licence, and having given you my authority, they would have been the same coming from you as from me. I am sorry that anything further disagreeable has occurred, but I do not anticipate it will be serious." Now listen to this passage:-" I quite thought you had returned all the old tonic. How comes it that you had a bottle of it?

Mr. Swifte: As far as I can see of this case, the questions of law will be the most important questions in it. I have not received much assistance from you. Have you any authori-

ties on the subject?

Mr. Clay: In this country there have been no superior court decisions on the question raised. I am not going to say that an analogy may not be drawn with some English cases; but I submit that all this about whether she said these deleterious articles were to be put away or not, has nothing to say to section 30, under which we prosecute. The offence is committed if she keeps open shop and sells poison. This Society is only protecting the public.

Mr. Swifte: Was the summons served on Miss Stewart?

Is there any objection to the service?

Mr. Clay: None whatever.

Mr. Swifte: It was a substituted service, and unless it is

Mr. Campbell, Q.C.: It would not be good service at all, and I think this lady should have been prosecuted in England if at all; but really, sir, I have what I consider to be an honest ease on the facts, and I prefer to deal with it the moment my friend has done.

Mr. Swifte: Is Madame Ruppert's name over this shop? Mr. Clay: Yes, and she issues her prospectuses from it, and this lady is her partner. She gets a third of the sales.

Mr. Campbell, Q.C : That's discount.

Mr. Swifte: I don't think you can go into further evidence now, because the prosecution has closed. I don't think the documents show that she is a partner.

Mr. Clay: That is my contention. It shows how clever these American ladies are.

Mr. Swifte: If there is a partnership, I might have to dismiss the summons on the ground that you should have served them both.

Mr. Clay: They are both liable.

Mr. Campbell submitted that it could not be said that Madame Ruppert kept open shop for the sale of the poison in question.

Mr. Clay said, this was a special Act of Parliament passed for the protection of the public against misadventure or death; and the Court was bound to decide the ease under the 30th section of the Act. It had been proved that the defendant kept open shop and that she sold the poison.

Mr. Swifte: I intend to reserve my judgment, because I have not had an opportunity of looking fully into the authorities. The learned Magistrate, however, called attention to three cases which he cited, in two of which it was held that the employers were not liable for the acts of their servants, in the third that the employer was liable. In the present case there could be no doubt that Madame Ruppert kept open shop at 74 Grafton Street, but the question was, Did she keep open shop for the sale of poison? His Worship then said he hoped to be able to give judgment on the following Friday at 12.30 o'clock.

In the Westminster County Court, on Tuesday, in the ease of Ruppert v. Nives before Judge Lumley Smith. Madame Anna Ruppert, dealer in cosmetics and toilet-requisites, Regent Street, London, sued to recover the sum of 131.5s. 4d. in respect of goods supplied to the defendant, Mrs. Annie Nives, a lady who carries on a similar business at Newman Street, Oxford Street. Mr. Tyrrell appeared for the plaintiff, and Mr. Stapleton Firth for the defendant. Mr. Tyrrell said his client was very well known in the West-end, and in various parts of the kingdom, for the sale of cosmetics and toilet-requisites. The defendant formerly carried on business at Bournemouth. An arrangement was made by which the defendant was to be supplied with goods for prompt each for sale in her business at Bournemouth, and upon that understanding it was agreed that she (defendant) should have a commission of 50 per cent. on all sales. In pursuance of that agreement goods were supplied from time to time, and payments on account had been made, but there was still due the amount represented on the summons. The defendant subsequently gave notice of her intention to discontinue the sale of the goods, and returned the unsold portion of them to the plaintiff; but she refused to take delivery of them on the ground that they were sold out and out, and were not on sale or return. The defendant now set up a counterclaim of 50l. in respect of alleged damage to her business and loss of credit in consequence of having been induced to sell the plaintiff's goods, which were afterwards condemned in various newspapers as being poisonous preparations, the result of which was that the defendant's trade at Bournemouth was brought to a total standstill.

Mr. Harry Stimpson, who formerly acted as manager to the plaintiff, and in 1889 Mrs. Nives called at the Regent Street premises, and said she was about to commence business for the sale of her own goods in Bournemouth, and proposed to take up an agency for the sale of the plaintiff's hair and skin tonics. Witness told her that if she chose to carry on the business entirely at her own expense, and was prepared to pay prompt eash for the goods supplied to her, she could be supplied with the preparations on such terms as would allow of her getting a profit of 50 per cent. She was perfectly satisfied with that arrangement, and in pursuance of it goods were supplied from time to time. Some

of them had been paid for, and a certain portion had been returned, but the plaintiff did not accept delivery of them, as they were not sold on sale-or-return terms, and there was now due the sum elaimed in the action.

Mr. Firth, on behalf of the defendant, said he would not dispute the order and delivery of the goods, but his point was that the skin-tonic, which formed the major part of the claim, was a poisonous compound, and that the whole transaction was an illegal one, and one upon which the plaintiff was not entitled to suc. It would be proved beyond all doubt that the skin-tonie contained bichloride of mercury in considerable quantities, and that the sale of such a poisonous compound was contrary to the Pharmacy Act. So far as the harmless goods were concerned he was prepared to admit his client's

liability, but not for the poisonous ones.

In cross-examination Mr. Stimpson said he did not know exactly what the component parts of the skin-tonic were, and could not of his own knowledge say that it contained poison, but he had heard that such was the ease. He was not a qualified ehemist or druggist, nor had he any anthority to sell poisons. He could not say whether or not there was any person in the plaintiff's employ who had such authority. While he acted as manager to the plaintiff (December, 1891, to March, 1893) he had very few complaint as to her treatment, while, on the other hand, he had a great many letters of thanks and appreciation.

The Judge: I think we may take it as a matter of course that those persons who used the plaintiff's remedies and did not derive any benefit from them would complain, while those who did get benefit would speak in high praise of it. It does not follow that all specialists are quacks because they charge a high price for an article which costs them

very little to prepare and place upon the market.

In further cross-examination the witness was asked as to whether or not be had read certain articles and reports which had appeared in the trade Press and daily newspapers concerning the plaintiff's preparations.

His Honour held that those questions were not relevant to the case, inasmuch as the papers referred to could not be

put in evidence.

Mr. Firth: My reason for putting these questions is merely to show that there have been cases of very eruel suffering involved upon innocent persons by the use of this lady's goods.

The Judge: That is a question for another tribunal, and cannot be gone into here. What we have to decide is whether or not the sale of these admittedly poisonous goods by the plaintiff to the defendant was or was not an illegal transaction. This preparation might be very beneficial if used discriminately; it might also be very harmful if used carelessly by an ignorant person.

In further cross-examination the witness said he did not know what the particular case was which had been referred to in the newspapers as one of exceptional eruelty, but he had assisted Madame Ruppert in going through documents which related to about 20,000 customers and had been unable to find any trace of such a case. A challenge was then thrown out to the "Press" to prove the accuracy of the

allegations, but the challenge was never taken up.

Re-examined by Mr. Tyrrell: When he had a conversation with the defendant on the subject of the sale of the goods she told him that she had had the tonic analysed by a chemist. and had found it to be very good indeed. She said she knew there was a slight amount of poison in it, but only to that extent which would be beneficial for the cure of certain affections of the skin. The goods were supplied to the defendant in the ordinary course of trade, and not a single word of complaint was ever received from her until these proceedings were commenced. When she made arrangements for taking up the sale of the goods in Bournemouth she said that she must have the tonic which contained bichloride of mercury. He (witness) reminded her that it was not legal to sell it except through a chemist or in the wholesale way of trade, but her answer was that she knew all about the law which governed the sale of poisons, and that she must have it. The plaintiff's premises were kept open for the sale of preparations for the skin and hair and of toilet-requisites in general. There were consulting-rooms, and patients were advised and treated, but witness had received strict instructions from Madame Ruppert not to sell the poisonous skintonic to any member of the general public. He was aware

that Madame Ruppert had been convicted in Dublin for the sale of poisonous preparations, but he had certainly never heard it suggested that she had been warned out of Berlin or America, neither was he aware that she was being sued in America for the return of money paid.

Mr. Tyrrell said that so far as the case had gone at present

that was all the evidence he proposed to offer.

Mr. Firth said it was frankly admitted that a poisonous compound had been sold by the plaintiff to the defendant, and he submitted that the act was an illegal one and that the plaintiff's claim was barred by the Pharmacy Act, which prohibited any unanthorised person from selling poison or compounding a poisonous preparation. If the plaintiff could recover anything, it could only be for the non-poisonous

goods supplied.

Mr. Firth intimated that he should call Madame Ruppert as his own witness if he found it necessary. He had a large batch of letters from persons in the highest rank, whose names he was pledged not to divulge, but those letters, if read, would show that many of the writers had suffered very severely by the plaintiff's treatment. He submitted, however, that apart from the facts of the case he was entitled to recover in law, inasmuch as the plaintiff had been guilty of a distinct breach of the Pharmacy Act, which prohibited the sale of poisons by any other than a properly qualified chemist.

Mr. Tyrrell said he had not the Act before him, but he believed there was a section which exempted the wholesale

sale of poisons.

The Judge: I will take a note of the objection, because we don't know where this case may go to. We may take it broadly, however, that anyone who is not a duly authorised person for the sale of poisons is liable to a penalty, unless it

is sold by wholesale, or for export.

Mr. Firth, proceeding, said that in 1892 his client first came into contact with the plaintiff by baving written articles to various newspapers for her in connection with her business as a specialist for the cure of affections of the skin. This friendship ripened as time went on, and led to the defendant taking up the agency for the sale of the plaintiff's goods in Bournemouth, where she was about to open up a business on her own account. At the time the defendant was not aware that the plaintiff's skin tonic contained poison, and it was not until she heard of the prosecution in Dublin that she became aware that such was the case. Consequently, after spending about 50l. in bringing the goods before the people in Bournemouth, she suddenly found that her business was lost, and that people would not come near. She had therefore to shut up and return to London, and she returned the unsold goods to the plaintiff.

Mrs. Annie Nives was called, and said she now carried on business under the style of Cornelia Grey, at Newman Street, Oxford Street, for the sale of cosmetics and toilet requisites. She narrated her version of the Bournemouth agency, stating that the plaintiff's skin lotions were described as being perfeetly harmless, and she was never told that they contained poisonous ingredients. She had one bottle analysed by a chemist. It was true she was to have a profit of 50 per cent. on the sales, but out of that she was to bear the whole expense of advertising and other incidental expenses. She estimated that she had expended 52l. 9s. 4d. in that way, and it was that expenditure which was now the subject of her counter-claim. She was now carrying on an extensive and high-class business in London, and had a large number of the leading members of

the aristocracy for her clients.

The Judge: There is no evidence at present of any loss of credit, but, on the other hand, the defendant admits that she is in a better position now than she ever was before.

In cross-examination the witness said she was formerly connected with newspaper advertising work, and it was in that connection that she first came into contact with Madame Ruppert. She knew a Mrs. M'Kerrow, but would swear that she never told her in 1892 that she knew what the plaintiff's tonic was composed of, and that there was poison in it. that time she did not know what it was composed of, but she had used it upon her own skin with beneficial results. It was not until this action was brought that she first made any complaint as to the poisonous character of the goods. On November 4 last year she found it necessary to enter into January 8, Samuel Pilley and Henry Pilley, chemists, Boston,

a deed of arrangement with her creditors, whose claims exceeded 500%. Her business in London was not quite similar to the plaintiff's, but was more exclusively in perfumery and toilet goods. She distilled rose leaves as a speciality, and had received honourable mention for her. preparations.

Mr. Peter Auchinacie said he was an analytical chemist, and gave the result of his examination of the plaintiff's skin tonic. He found four grains of bichloride of mercury to the

cight-oz. bottle.

Madame Ruppert was called by Mr. Firth as a witness for the defence, and detailed at some length the process under which she carried on her business. She was not a qualified chemist, but her business was carried on for the sale of cosmetics and toilet requisites. Books of account were kept, and the whole of the entries relating to the case in question were contained in the books now in court. She had seen many articles and reports, both in the medical and chemical press, and also in the daily newspapers, and while some of them criticised her adversely, others spoke in the highest terms of her method of treatment.

Mrs. M Kerrow was called to give rebutting evidence on behalf of the plaintiff, and said that in the latter part of 91 or beginning of 92 she had a conversation with Mrs. Nives, and remembered Mrs. Nives saying there was poison in the skin tonic, and that she knew what it was composed of, and if she only had the money to advertise it she could produce the same thing, and sell it at a much lower price to the public than Madame Ruppert was doing.

Cross-examined: She had herself used Madame Ruppert's skin tonie, and the result of its application had been most beneficial to her. In her connection with a newspaper called Gentlewoman, she had frequently written in favour of it. She first became aware that it contained poison when she read an article which appeared in one of the trade papers.

Mr. J. E. Jewell, a dispensing chemist, of 95 Haymarket, gave it as his opinion that bichloride of mercury, if used in a proper manner, was most beneficial in almost all eases of affection of the skin.

Mr. Tyrrell referred his Honour to section 16 of the Pharmacy Act, which exempted the wholesale sale of poisons.

In giving judgment his Honour said he was not called upon to give an opinion whether the preparation was barmful or beneficial. The question he had to decide was whether Madame Ruppert was entitled to recover payment for a preparation supplied to the defendant in the way of trade, and which admittedly contained poison. In his opinion, section 16 of the Act was not intended to apply to persons who carried on the kind of business that Madame Ruppert did, but rather to large wholesale dealers and exporters connected strictly with the chemist's trade. Having come to that conclusion, he did not think Madaiue Ruppert could recover that portion of the claim relating to the twenty-four bottles of tonic, but as to the other items in the account which it was admitted were harmless, she would recover. That would be judgment for the plaintiff for 61.3s. 3d. on the claim, with costs. With regard to the defendant's counterclaim it had been said that she had suffered loss of business and reputation in consequence of having sold the plaintiff's goods. The result of selling a poisonous compound might very well be prejudicial to the person who used it, but there was no evidence that such was the case in this instance. The newspapers attacked the stuff, and the defendant gave up selling it, but there was no evidence to prove that she had suffered loss of business or of reputation. Her own evidence went to show that she was in a better position now than she ever was before, and that she was surrounded by clients drawn from the very cream of the aristocracy. There was really nothing to support the counterclaim, and judgment must be for the plaintiff on that point also. That would be judgment for plaintiff on the claim to the extent of 6l. 3s. 3d. with costs, and also on the counterclaim with costs.

Mr. Firth asked for a stay of execution pending notice of appeal, and it was understood to be granted on condition that the debt and costs were paid into court.

### SALE OF ARSENIC.

AT the North Holland (Boston, Lincs.) Petty Sessions on

were charged with having on October 14 sold 1 lb. of arsenic to a person unknown without having a witness present to whom the said person was known. Mr. Henry Pilley appeared and admitted the offence. Supt. Crawford stated that a short time ago he received information from Mr. Hornbuckle, who had a farm at Wrangle, that some of his horses had been poisoned. It was found on inquiry that the man whose duty it was to look after the animals had given them arsenic-not with the intention of poisoning, but still in sufficient quantity to have that effect, and three valuable horses had died, one being valued at 701. Upon inquiring amongst the chemists of the town he found that the horseman, whose name was Willerton, had obtained the arsenic from Messrs. Pilley's. He found the entry in the poisons book, which showed that the arsenic had been sold without a witness, and Mr. Pilley said he did not know the man. The Bench retired, and on their return asked Supt. Crawford if it was a prevalent custom to sell arsenic, and he replied that he had received several complaints, and thought it was. The Chairman said it was a dangerous practice to sell so large a quantity of poison to an unknown person, although the Bench did not suppose it was done with any wrong intentions. They felt, however, that they could not impose a less fine than 5l. and costs—which amounted to 11s.

## THE NEW RULES FOR CHEMICAL-WORKS.

THE Home Secretary has approved of the new rules printed below to be applied to all chemical-factories. The rules will shortly be issued to the manufacturers concerned, and these, in accordance with section 8 (2) of the Factory Act of 1891, will be allowed twenty-one days from the date of issue of the regulations in which to make objections.

## FACTORY AND WORKSHOPS ACTS, 1878 TO 1891.

Special Rules.—Chemical-works.

I. In future every uncovered pot, pan, or other structure containing liquid of a dangerous character shall be so constructed as to be at least 3 feet in height above the ground or platform. Those already in existence which are less than 3 feet in height, or in cases where it is proved to the satisfaction of an inspector that a height of 3 feet is impracticable, shall be securely fenced.

II. There shall be a clear space round such pots, pans, or other structures, or where any junction exists a barrier shall

be so placed as to prevent passage.

III. Caustic-pots shall be of such construction that there shall be no footing on the top or sides of the brickwork, and

dome-shaped lids shall be used where possible.

IV. No unfenced planks or gangways shall be placed across pots, pans, or other structures containing liquid of a dangerous character. This rule shall not apply to blackash vats where the vats themselves are otherwise securely fenced.

V. Suitable respirators shall be provided for the use of the workers in places where poisonous gases or injurious dust may be inhaled.

VI. The lighting of all dangerous places shall be made

thoroughly cfficient.

VII. Every place where caustic soda or caustic potash is manufactured shall be supplied with syringes or wash-bottles, which shall be enclosed in covered boxes fixed in convenient places, in the proportion of one to every four caustic-pots. They shall be of suitable form and size, and be kept full of clean water. Similar appliances shall be provided wherever, in the opinion of an inspector, they may be desirable.

in the opinion of an inspector, they may be desirable.

VIII. Overalls, kept in a cleanly state, shall be provided for all workers in any room where chlorate of potash or other chlorate is ground. In every such room a bath shall be kept ready for immediate use. In every chlorate-mill tallow or

other solid lubricant shall be used instead of oil.

IX. Respirators charged with moist oxide of iron or other suitable substance shall be kept in accessible places, ready for use in cases of emergency arising from sulphuretted hydrogen or other poisonous gases.

X. In salt-cakes departments suitable measures shall be adopted by maintaining a proper draught, and by other means, to obviate the escape of low-level gases.

XI. Bleaching-powder chambers, after the free gas has, as |

far as may be practicable, been drawn off or absorbed by fresh lime, shall, before being opened, be tested by the standard recognised under the Alkali Act. Such tests shall be duly entered in a register kept for the purpose, which shall be produced to an inspector whenever called for. All chambers shall be ventilated, as far as possible, when packing is being carried on, by means of open doors on opposite sides and openings in the roof, so as to allow of a free current of air.

XII. In cases where the co-operation of the workers is required for carrying out the foregoing rules, and where such co-operation is not given, the workers shall be held liable, in accordance with the Factory and Workshop Act, 1891, section 9, which runs as follows:—"If any person, who is bound to observe any special rules established for any factory or workshop under this Act, acts in contravention of, or fails to comply with, any such special rule, he shall be liable on summary conviction to a fine not exceeding 2l."

R. E. PRAGUE ORAM, H.M. Chief Inspector of Factories.

A special set of rules has been framed for bichromateworks. They contain Clauses I., II., IV., and XII. of the rules printed above without any alteration; also the first sentence of Rule IV. The remaining rules are replaced by the following:—

Respirators suitable for protection of nostrils and mouth shall be provided where injurious dust or noxious fumes may

be inhaled.

The lighting of all dangerous places shall be made thoroughly efficient.

Inasmuch as dust is the principal cause of the various evil results to workers in chromium compounds, all due means shall be taken to limit in every way the formation of dust.

Gloves of some waterproof material shall be provided for

the use of workers who handle the crystals.

Sufficient lavatory accommodation, with hot and cold water, soap, nail-brushes, and towels, shall be provided.

## SEASONABLE ADVERTISING.

The "West Highland Almanack" issued by Mr. Samuel Lawrence, of Oban, maintains its reputation as a booklet of information specially useful to the people residing in the West Highlands.

The same respect to local needs is shown in the almanack issued by Messrs. W. F. Wells & Son, Upper Sackville Street, Dublin. It is a 56-page small 32mo booklet, and contains cab and tramway fares and other information of that nature. It is well done, and the cover is a good design.

Mr. H. W. G. Morris, of Thame, publishes an illustrated family almanack, of which the distinctive feature is that the advertisements are printed on tinted paper, while the diary pages are on white paper.

In Mr. W. H. Dixon's "East Grinstead Family Almanack and Directory," the local information idea is carried to a high pitch, so that the book becomes of necessity permanently useful, and that is what is required with price-lists.

One of the prettiest calendars we have received is sent out by Mr. J. H. Weston, chemist, Runcorn. It bears the figures of three nineteenth-century cherubs (not including the cat). A similar design is attached to a useful letter-rack and tidy, which Mr. Weston also presents to his customers. Every month Mr. Weston publishes a *Household Journal*. It contains 16 8vo pages of good reading, such as a tale, a few characteristic sketches, some poetry, fashion notes, and oddments of the following nature:—

Everything on the bill of fare was in restaurant French, and he didn't like it. "Here, waiter," he said sternly, "there's nothing on this I want." "Ain't there nothin' you would like for dinner, sir? "said the waiter politely. "Have you got any sine qua non?" The waiter gasped. "No, sir," he replied. "Got any some file?" "N-no, sir." "Got any semper idem?" "No, sir, we haven't." "Got any jent d'esprits?" "No, sir, no one?" "Got any tempus fugit?" "I reckou not, sir." "Got any soirée dansante?" "No, sir." "We hain't sir." "Got any pluribus unum?" The waiter's face showed some signs of intelligence. "Seems like I heerd of dat, sir," and he rushed out to the kitchen, &c

All the advertisements in the journal are Mr. Weston's, so we gather that it pays him: advertising always does if one keeps at it. It is the half-hearted people who lose by it.



Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

## 42 CANNON STREET, E.C., January 11.

## Tea-seed Oil.

Referring to our note on the offering of Cevlon tea-seed at the recent drug-auctions, a writer in the Indische Mercuur points out that Camellia oleifera, Abel, a plant closely allied to the tea-shrub yielding the leaves of commerce, is largely cultivated in China for the sake of the pale bland oil prepared from its seeds. These seeds contain a considerable proportion (10 to 44 per cent.) of oil of saponine, a toxic element, and their oil, nnless refined, ls, therefore, nnsuited for eating. The pressed cakes, containing the bulk of the saponine, are used as a halr-wash, a fish-poison and an insecticide. The seeds of the Japanese camellia (C. japonica) yleld an oil which excels as a lubricant. Of tea oil proper (i.e., oil from the seeds of Camellia theifera, Griff.) two varieties are recognised—viz, the Chinese and the Assam oil. Chinese tea-seed oil is of the consistency of ollve oil, pale yellow and inodorous. The oil has a sp. gr. of 0 917 te 0.927 at 15° C., is insoluble in alcohol, and congeals at -5° C. (?). It is edlble, very suitable for soap-manufacture, and forms a useful lubricant. Oll of Assam tea-seed grown in Java has been investigated recently by Mr. L. van Itallie, city pharmacist, of Rotterdam. The oil is present in the husked seeds to the extent of about 20 per cent., and can be extracted by petroleum and ether. It has an acrid taste, a pale-yellow colour, very thin consistency, a sp. gr. of 0 920 at 15°, and congeals at  $-12^{\circ}$ . Its iodiue number (Hübl) is 88, and its saponification number 194. It contains 915 per cent. of fatty acids seluble in water. The chief constituents of the oll were palmitinio acid (about 19 per cent.), liquefiable fatty acids (oleic and linoleic acids, about 72 per cent.), glycerine (about 8 per cent.), with traces of volatlle fatty acids, lecithin, and phytosterin.

It is not at all unlikely that there may be a future for tea-seed oil in the European markets, but in that case it will be necessary to supply a better class of seed than that which was shown at the auctions. It is doubtful whether it would not be the better plan to send over the oil pressed in Ceylon or India. It appears that some of the merchants to whom samples of the tea-seed have been sent are of opinion that the oil obtained from it would find a ready sale in quantity, in London, at 20l. to 22l. per ton as a safe quotation. Planters are advised to crush 5 or 10 tons of seed and send the oil over to Lendon, on trial, in packages not exceeding 10 cwt. each. "Let them," remarks one adviser, "put a brand on the packages, but avoid indicating that it Is tea-seed oil" (sic!).

## The Réunion Vanilla Crop.

The experts of vanilla from Réunien, according to official figures which have only just been published, were 70 tons (value 67,760l.) in 1891, and 96 tons (value 115,200l.) in 1892. Réunion is the largest vanilla-producing country. The fruit is exported mainly by the Messageries Maritimes steamers to Marseilles and Havre at a freight of nearly 10l. a ton. It is mostly bound for the French market: Paris, Bordeaux, and Nantes; but a considerable quantity goes to Hamburg for German, Austrian, Danish, and Norwegian

use. The London market is supplied mainly from the Seychelles and Mauritius, and receives very little vanilla from Réunion, even vid. France. The vanilla pod loses about three-quarters of its weight in preparation. It is either plunged in boiling water or heated in ovens. It is then placed in the sun, carefully covered over to prevent undue heating, after which it is dried under cover and closely watched for the slightest trace of moisture. The whole treatment takes about three months.

#### The Port of Manchester.

The arrivals of merchandise from abroad by the Ship Canal at the port of Manchester are recorded for the first time in to-day's Customs Bill of Entry. The following chemicals figure on the list as imported from abroad by this route between January 1 and 8:—From Rouen. 59 packages potash and 50 casks extract; from Rotterdam. 57 packages colours, 5 cases ultramarine, 4 casks minium, 40 bags gum, 6 casks red lead, 20 tubes carbenic acid, 20 casks potash, 16 casks oxalic acid, 58 packages ultramarine, 4 casks nitric acid, 19 barrels alizarine, and 20 casks tartaric acid; from Antwerp, 21 casks colours and 40 drums potash.

#### Board of Trade Returns.

The return just issued from this department shows a decided decrease, both as regards the import and the export trade of the United Kingdom during 1893. The total amount of imports from foreign countries and British possessions for the year was 405,067,690l., as against 423.892,178l. in 1892, or a decrease of 18,824,488l. In exports the decrease is not so large, the totals on this side reaching 218,496,246l. in 1893, and 227,077,053l. in 1892, showing a decrease of 8,580,807l. In chemicals, dye-stuffs, and tanning substances there is also a falling-off in trade amounting to 341,198l., the figures being 6,694,841l. in 1892, and 6,353,643l in 1893. Oils imported show an increase, however, of 333 806l.—viz., 7,076,035l. in 1892, and 7,409,841l. in 1893. In the expert of chemicals and chemical and medicinal preparations a better trade has been done: in 1892 the figures read 8,584,893l, and last year 8,695,234l.—an increase of 110,341l.

ACID (CITRIC).—The article is just a little steadier—1s 5d. per lb. Concentrated juice is quoted at 14l. 15s. to 15l., f.o.b.

ACID (TARTARIC).—Very firm. A good business has been done during the week, and for  $Foreign\ 10\frac{5}{8}d$ . has been readily paid; while  $10\frac{3}{4}d$ . is now asked upon the spot, and from  $10\frac{1}{2}d$ . to  $10\frac{5}{8}d$ ., c.i.f. terms, for delivery. English tartaric acid is also firmer, and the lowest prices are from  $10\frac{3}{4}d$ . to 11d. per lb.

ALOES.—There has just been a further arrival of 47 cases Cape aloes from Mossel Bay, South Africa. Ten cases Cape aloes, offered on Friday last, sold at 22s. 6d. for good bright hard, showing about 6d. recovery on the sale of the previous day. A parcel of kegs Socotrine aloes remained unsold.

ABAROBA.—There has been another arrival of 15 cases from Bahia.

ASAFŒTIDA.—The bulk of the recent arrival (114 cases) was offered at the auction on Friday, when medium kinds brought extremely high rates, but common qualities were about 5s. lower. Small to bold, slightly blocky dry and friable loose almonds realised 117s. 6d.; pinky block, dark and drossy mixed, 70s. to 71s.; goed grey block, small to medium almonds, clean, but slightly damp, 86s. to 88s; grey earthy small sandy lump, 51s.; grey heavy earthy to ditto, dry small to bold, slightly blocky, loose almonds, 61s. to 67s. 6d.; small grey lump and loose, fair, dry, and sandy, 27s. 6d. to 28s. per cwt.

CALUMBA.—One hundred and eighty-seven bags were nearly all sold last Friday, at very low prices—namely, 11s. to 11s. 6d. for ordinary small to bold greyish sorts.

CAMPHOR (CRUDE).—The market is still on the decline, a sale of 100 piculs Japan camphor, January-March shipment, has been reported at 115s. per cwt., c.i.f. terms. Since then, however, the market has become firmer, and 122s. 6d. c.i.f. is now asked; while China still offers at 97s. 6d. c.i.f.

CANARY-SEED is higher in price again. Sales of about 500 bags good Turkish have been made recently at 45s, to 46s, per quarter.

CANNABIS INDICA.—The parcel of 74 robbins which was shown on Friday last was not sold, the whole lot being bought in on the basis of  $2\frac{1}{2}d$ , per lb. for dull, partly stalky, greenish tops.

CASSIA FISTULA.—This week about 250 packages have arrived from Holland, where there have been considerable imports lately. One vessel left Java early in December with 1,184 piculs of the drug.

CHLORATE OF POTASH is rather firmer. On the spot the quotation is now  $7\frac{3}{4}d$ , per lb., and for delivery the figures are, January–March,  $7\frac{5}{8}d$ . to  $7\frac{3}{4}d$ .; January–June,  $7\frac{1}{2}d$ . to  $7\frac{5}{8}d$ .; the whole of 1894,  $7\frac{1}{3}d$ . per lb.

CINCHONA.—The first auctions of the year were held on Tuesday, when a moderate quantity of bark was offered by six brokers. Their catalogues aggregated of—

			1	Paokage	6	Packs	gea
Ceylon cinchor	na.	••	• •	329	of which	h 329	were sold
East Indian ci	nchor	ıa	• •	506	11	397	19
West African		••		283	**	283	,,
Cuprea bark	• •	• •	••	377	"		29
				1,785	"	1,009	,,

Succirubra barks were in poor supply, and of Ledger's also very few parcels of any significance were offered. The bulk of the Ceylon and Indian barks consisted of original and renewed Officinalis, containing from 4 to about  $6\frac{1}{2}$  per cent. of quinine. These were very well competed for, and occasionally a lot would be run up to quite double the starting-price. The sales were undoubtedly very firm throughout, and in some cases higher prices were paid, the unit being generally quite up to that of the last Amsterdam sale. It may be put at barely  $\frac{7}{8}d$ , per lb. as a general quotation. The following were the quantities of bark purchased by the chief competitors:—

,		Lbs.
Messrs. Howards & Sons	••	69,081
Agents for the Auerbach works		47,210
Agents for the Mannheim and Amsterdam works	• •	32 203
Agents for the American and Italian works		27,440
Agonts for the Brunswick works	••	14,672
Agents for the Paris works		12,900
Agents for the Frankfort-on-the-Main and Stuttg	art	
works		3,076
Sundry druggists	••	21,475
Total quantity sold	••	228,057
Bought in or withdrawn	••	73,919
Total quantity of bark offered	••	301,976

It should be understood that, owing to the wide range of alkaloidal value, the quantities of bark purchased by the buyers give no indication of the weight of sulphate of quinine secured by them. The following prices were paid for sound bark:—Ceylon Cinchona. Original, red varieties, dust,  $1\frac{3}{4}d$ .; ordinary weak shavings,  $1\frac{7}{8}d$ .; dull woody to fair bright quilly stem and branch chips,  $1\frac{1}{4}d$ . to 2d. per lb. Grey varieties:—Ordinary dull to fair bright quilly branch and stem chips, 2d. to  $3\frac{1}{8}d$ .; low weak stem chips,  $\frac{7}{8}d$  per lb.; good strong root,  $4\frac{1}{4}d$ . per lb. Yellow varieties:—Good bright quilly chips,  $5\frac{1}{4}d$  to  $5\frac{1}{2}d$ .; root,  $4\frac{3}{3}d$ . per lb; hybrid chips,  $1\frac{5}{8}d$ . per lb. Ilenewed, red stem chips,  $1\frac{1}{2}d$ .; hybrid shavings,  $2\frac{7}{8}d$ . to 3d. per lb.

East Indian Circuona.—Original—Common red chips, 1d.; grey varietics, ordinary dull dusty to good bright quilly stem and branch chips,  $1\frac{5}{8}d$ . to  $3\frac{3}{4}d$ . per lb.; yellow stem and branch chips, fair to good bright quilly,  $2\frac{1}{2}d$ . to  $4\frac{3}{8}d$ . per lb.; common branch chips,  $\frac{1}{2}d$ . per lb. Renewed—Grey varieties: ordinary to good quilly branch and stem chips,  $3\frac{1}{8}d$ . to  $4\frac{1}{2}d$ .; fine bright rich ditto,  $4\frac{7}{8}d$ . to  $5\frac{1}{8}d$ . per lb.; partly broken quill,  $5\frac{1}{4}d$ . to  $5\frac{3}{8}d$ . per lb.; fair yellow chips,

AFRICAN CINCHONA.—A parcel of 283 bales, imported  $vi\hat{a}$  Lisbon, sold at  $3\frac{1}{8}d$ , to  $3\frac{1}{4}d$ . per lb. for good, partly irregular, quill, of Succirubra character; and at  $2\frac{1}{4}d$ . to  $2\frac{5}{8}d$ . per lb. for chips of the same kind. The bark was much better packed than usual, only a few packages being country-damaged.

CUPREA-BARK.—Three hundred and seventy-seven bales of old stock were shown, but all bought in. Bids ran from  $\frac{1}{2}d$ . to  $1\frac{1}{4}d$ . per lb., while the owners asked from  $1\frac{\pi}{4}d$ . to  $2\frac{1}{2}d$ . per lb., according to quality. Having held the bark so long, they probably think that they may as well keep it for another while, until there is a better prospect of a rise.

The increasing alkaloidal richness of the Java cinchona is shown by the following figures, showing the quantities of bark, of various quinine percentages, offered at the Amsterdam auctions during the last three years:—

-	1893	1892	1891
Per cent. 1 to 2 2	Kilos,	Kilos,	Kilos.
	167,754	148,496	366,302
	764,057	546,096	708,601
	1,180,913	1,051,436	977,696
	1,151,774	1,008,610	731,203
	822,346	588,492	455,380
	485,755	240,967	202,185
	226,901	163,241	103,127
	70,833	55,565	36,041
	20,780	18,015	6,080
	10,531	43,585	4,820

The proportion of root to stem and branch bark offered at the Amsterdam sales in 1893 shows a considerable decrease upon the previous year—a fact which contradicts the assertion frequently made, that large quantities of trees are still being uprooted in the island. Here are the figures:—

Sales in	Root-bark	Stem and Branch Bark	Per Cent. Of Root-bark
1893 1892 1891	Kilos. 757.670 3,167,065 2,833,608	Kilos. 4,151,667 707,936 774,755	about 151 171 ., 21½

The sales of quinine (in the bark), both at auction and privately, in Amsterdam are estimated as follows:—

	Kilos	149,663	131,620	135,335	
he	first-hand	stock of cinch	iona-bark in	Amsterdam	0

January 1 was:

1893
1892
1891
Packages .. 14,184
11,268
5,279

The average quinine-content of the bark offered at auction has been :—  $\,$ 

1892 1891 1890 1889 1888 Per cent. . 4·60 4·50 4·08 4·00 4·12

The quantity of quinine in the bark offcrod for sale on Tuesday was about 11,000 lbs. It is announced by cable from Java that the shipments of cinchona during December have been small—namely, only 420,000 half-kilos. as compared with about 1,000,000 in December 1892. The entire shipments from January to December, however, exceeded those of 1892 by about one million half-kilos.

Another shipment of 18 bales Loxa bark is on the way from Ecuador. The stocks of bark in London, on January 1 were 37,387 bales, composed as follows:—East Indian, Ceylon, and Java, 15,242; Soft Colombian, New Granadian, Pitayo, and Cuprca, 14,354; Cartagena, 920; South American red bark, 63; ditto Crown and grey bark, 1,106; Calisaya, flat and in quills, 5,702 bales.

CLOVES.—Zanzibar cloves keep very quiet, and only a very small business has been done for delivery. January—March has sold at  $2\frac{\pi}{3}\frac{d}{d}$ . February—April at  $2\frac{13}{16}d$ . per lb. At auction no Zanzibars were offered; 19 bags Seychelles sold at low prices—namely, good to fine bright,  $3\frac{\pi}{3}d$ . to  $4\frac{\pi}{4}d$ ., and headless,  $2\frac{\pi}{3}d$ .; privately Zanzibar cloves are reported to have sold on the spot at  $2\frac{3}{4}d$ . per lb.

COCAINE is gradually creeping up. The manufacturers have a gain raised their prices by 1s. 6d. per oz. this week, 100-oz.lots being now quoted at 16s., 25-100-oz. lots at 16s.3d., and smaller quantities at 16s. 6d. per oz. The rise is attributed to the advance of the price of crude material.

CREAM OF TARTAR is lower, best white French crystals being now offered at 60s. per cwt. f.o.b. Bordeaux. London quotes 64s. 6d. for crystals, and 67s. 6d. for powder.

CUREBS. One hundred and forty-two bags were shown at auction last Friday, but the whole of this was bought in at 75s. for fair brownish, partly dusty, from Singapore; and 60s. for fair sifted ditto.

DRAGON'S BLOOD.—In slight demand. Of 22 cases offered on Friday, a few sold without reserve at 6l. 17s. 6d. to 7l. for rather ordinary, partly drossy seedy lump.

ERGOT OF RYE.—Business has been done in fair German at 1s. 1d. per lb. since the auctions; this shows a slight improvement in value.

Galls (Chinese).—The spot supplies seem to have run very low, and nothing can be had below 52s. 6d. per cwt. for fair quality. There are still sellers at low rates, however, for forward delivery, 42s. to 42s. 6d. per cwt. "c.i.f." being quoted, according to position.

Gambier.—Cubes are selling at 30s, to 31s, per cwt. on the spot, block realises 16s,  $10\frac{1}{3}d$ , per cwt.

GINGER.—Of Cochin Ginger, the very large supply of nearly 2,000 bags, mostly one or two years old, was offered and of this 733 bags sold without reserve at the heavy decline of 10s. to 15s. per cwt., hard brown rough at 40s. 6d. to 41s. 6d., fair to good bright medium and small washed rough at 41s. 6d. to 44s. 6d. falling to 37s. 6d., and old dull B. cut at 64s. to 66s. 6d.

GUM TRAGACANTH.—"In gum tragacanth, which comes both from Persia and Sulimania," writes our Consul for Bagdad and Bassorah, "a larger trade was done in 1892 than has ever taken place in past years. The supply was large, and everything brought to market was eagerly bought up, owing to the high prices which were ruling in the London market. This article some years ago was almost unknown here, and now it is one of our principal exports, and promises to become of more importance year by year."

IPECACUANHA.—There is said to be a much better feeling in the market for Brazilian root since the last sales, and it is reported that Colombian has advanced no less than 3/l., and that some 35 packages of this kind have been privately sold since the auctions.

JABORANDI.—Fifteen bales of jaborandi leaves from Ceará (Brazil) were landed at Liverpool this week.

MENTHOL.—There is very little on the spot, and the price is nominally 20s. for good quality.

MUSK.—There is a fair inquiry for fine qualities of Tonquin pods, which are rather scarce on the spot.

OIL (CASTOR).—From Calcutta, under date of December 20, a decline is reported in the castor-oil market. Early delivery in particular is offering at a considerable reduction, but as buyers expect still lower prices they show no willingness to operate as yet. London quotes Calcutta firsts at  $2\frac{7}{8}d$ , to 3d.; seconds at  $2\frac{1}{2}d$ . to  $2\frac{5}{8}d$ . per lb.

OIL OF PEPPERMINT.—Of 9 cases Japan offered on Friday last one of twelve 5 lb. tins of good colour, containing about 40 per cent. of menthol, sold at 12s. per lb., the rest being bought in at 12s. 3d.

OPIUM.—Our Smyrna correspondent writes, under date of December 30:—"The sales in our market for manufacturing opium for December amount to 370 cases, 300 of which were shipped to New York and Philadelphia. The remainder were taken mostly on speculation, as the prospects for the coming crop are by no means favourable, owing to the dry weather which rules here. To-day there are few sellers for current manufacturing opium under 9s. 5d. per lb. f.o.b. It is to be hoped, however, that the drought will not be of long duration, in which case holders may become less tenacious." From Constantinople we hear, under date of December 30, that business continues very brisk. The large American purchases have considerably relieved needy holders, and imparted a more healthy tone to the market. In the course of December "Druggists" sold to the extent of 90 cases at 8s. 4d. to 8s. 11s. f.o.b.; 10 cases 1893 and 12 cases 1893 Tokat grade at 10s. 3d. and 9s. 6d. f.o.b. respectively. Of these only 4 cases were for speculators' account, the balance being all taken by America. Snow is reported to have fallen

heavily inland. If this is true it will greatly minimise the risk of damage to the plants for the momen. The market closes firm at 8s. 10d. to 8s. 11d. f.o.b. for *Gruggists*' and 10s. 9d. f.o.b. for *Tokut* grades.

ORMS.—The Mequiner has brought twenty-seven bags from Mogador this week. In Leghorn, orris is reported to be selling to a slight extent at full prices; the quotation is 84s. per cwt. f.o.b. for selected Florentine, 77s. 6d. per cwt. f.o.b. for dark and small mixed ditto, and from 57s. 6d. to 65s. per cwt. f.o.b. for Verona root. We understand that the parcel of good Florentine root which was supposed to have been sold without reserve at the last auctions, but which is found to have been bought in, is now held for 90s. per cwt. We are informed that privately fine picked Verona orris has been sold at 72s. 6d. per cwt. The imports from Italy have been considerable lately.

PATCHOULY LEAVES.—Last Friday a parcel of 43 bales very small brownish leaf without stalk, of good aroma, imported from Alexandria, country damaged, was bought in 6d, per lb.

QUASSIA.—Thirty tons were bought in last Friday at the rate of 100s. per ton for fair logs, and 11l. per ton for good bright chips; this figure is said to be the price which the owners demand.

QUICKSILVER.—The importers have reduced their price to 6l. per bottle to-day.

QUININE.—Scarcely any transactions have been reported since the sale at last Thursday's auctions, and nominally the German bulk quotation (second-hand) remains  $10\frac{3}{4}d$ .; but to-day the market is slightly "off," and perhaps  $10\frac{5}{8}d$ . per oz. would not be refused.

SARSAPARILLA.—Of grey Jamaica root 21 bales sold on Friday last with fair demand as 1s. 3d. per lb. for sound, aud 1s. 1d. to 1s. 2d. for damaged. Honduras root, of which 12 serons were offered, was not sold, the parcel being bought in at 1s. 4d. per lb.

Senna.—Of Tinnevelly kind about 360 bales were offered on Friday last, and nearly all sold at some advance in price; fine qualities were not offered, the highest figures obtained being 4d, to  $4\frac{1}{4}d$ , for medium yellowish to fair green leaf; small to medium partly specky and greyish realised from  $3\frac{3}{4}d$ , down to 2d., dark to very common from  $1\frac{3}{4}d$ , down to  $\frac{1}{2}d$ , per lb. Six bales of Alexandrian senna pods realised  $1\frac{1}{4}d$ , to  $1\frac{3}{4}d$ , per lb.

STAR ANISE OIL. Small sales have been made on the spot at  $5s.\ 10d.$  per lb.

SUGAR OF MILK has been advancing in price lately, after having touched as low a figure as 41s. 6d. per cwt., at which the manufacture of the article did not pay. At present from 47s. 6d. to 50s. is quoted for good white quality.

## THE NEW YORK MARKET.

(From our Correspondent.)

NEW YORK, January 3.

The week now under review has been so much broken up by the holidays that but little business has been transacted, and, in addition to this, the fact that it was the last week of the old year caused buyers to defer all save the absolutely imperative purchases. Copaiba Balsam has been very quiet, no transactions of any moment having come to light. Stocks are small, however, and holders generally firm in their views. Nothing is reported in first hands, and second hands want 28c. for Central American. Concerning Mexican Vanilla Beans, a Philadelphia wholesale firm have issued the following circular dated December 28th:—"There is an actual shortage of over 30,000 lbs. less than last year's receipts. (In 1892, 177,000 lbs. came in, while in 1893 only 147,000 lbs. were received.) It will be remembered that in 1892 the crop was considerably short of previous years, caused by an extensive drought which destroyed the vines; from this cause alone it would require three favourable years to bring about a normal condition. The great desire on the part of some curers in Mexico the past season to get their beans on the market early caused some haste in 'curing' them, consequently the quality was

much impaired. If it were not for the fact of the prevailing financial depression we would undoubtedly see prices considerably higher to-day. The stocks now, however, are generally held in strong hands and not likely to be pushed on the market." This circular sets forth the prevailing conditions with considerable accuracy, and the general consensus of opinion is that vanilla is in a very strong position. Canada Balsam Fir is very firm at the recent advance to \$3.75. Stocks are light, and should any urgent demand develop a still further advance would most likely take place. Methyl Alcohol has been reduced by the combination to 95c. from 97 per cent. The New York Quinine and Chemical Works have reduced their price on Aloin to \$1.10 and on Santonin to \$3.50. Caffeine continues to advance in sympathy with the European markets. Castorum is in very light supply, and some holders now want \$28 for prime goods. Soap Bark is cabled as higher in London, but our prices have all along cabled as higher in London, but our prices have all along been above a parity with the London market, hence the news has not affected us. The combination which has so long controlled the output of Quicksilver on the Pacific coast has expired, and as a consequence the price has declined from \$37.50 per flask, to \$32.50. It is expected that the combination will be patched up very soon, however, and manufacturers have therefore not made any deduction and manufacturers have therefore not made any deduction in the prices of mercurials. A lot of 21 bales of Mexican Sarsaparilla came to hand this week, but did not come on the market. It is said to be en route to Europe. In a jobbing way  $10\frac{1}{2}$ c. to 11c. is wanted, and holders are firm at these advanced figures. A movement seems to be on foot to concentrate the holdings of Golden Seal, lots of 15,000 and of 4,000 lbs. having recently changed hands on private terms. Open quotations are firm at  $22\frac{1}{2}$ c. to 23c. Senega is dull and lifeless at 39c. to 40c. A firm offer at 38c. would very likely be accepted. Peppermint Oil is neglected, and in consequence is slightly easier. The quotations on Western bulk being \$2.45 to \$2.50, on Wayne County (New York) bulk \$2.60 to \$2.50, while H G. H. is quoted at \$2.95 to \$3, and it is probable that for a small lot \$2.92\frac{1}{2}\$ would be accepted. As soon as any inquiry develops, however, it is likely that prices will stiffen up. Texus Snakeroot is firm at 28c. to 30c.

## (Telegram from our Correspondent.)

NEW YORK, Wednesday night.

The price of Mexican sarsaparilla has suddenly fallen to  $9\frac{1}{2}$ c. per lb., or lc. per lb. since last week, owing to heavy and unexpected arrivals. Good Minnesota Senega root is now offering at 40c. per lb. The market is sluggish, and with a very slack demand this price is maintained with difficulty. Oil of peppermint keeps weak, and there is now no doubt that \$2.95 per lb. would be taken for H. G. H. brand. There are no buyers, however, and only lower prices could tempt purchasers. Golden seal root very firm at  $22\frac{1}{2}$ c. per lb.

## THE DUTCH MARKET.

(From our Correspondent.)

AMSTERDAM, January 6.

The cinchona-bark auctions to be held here on January 25 will consist of 5,743 bales and 385 cases (about 505 tons), divided as follows:—From Government plantations, 214 bales and 15 cases (about 24 tons); from private plantations, 5,529 bales and 370 cases (about 481 tons). This quantity contains: Of druggists' bark—Succirubra quills, 271 cases; broken quills and chips, 90 bales 110 cases; root, 18 bales. Officinalis quills, 1 case; broken quills and chips, 3 cases. Of manufacturing bark: Ledgeriana broken quills and chips, 4,479 bales; root, 736 hales. Hybrids broken quills and chips, 343 bales; root, 47 bales. Officinalis broken quills and chips, 30 bales.

## THE LIVERPOOL MARKET.

Anise.—Ninety-one sacks rather dusty Chilian, lately arrived, are held for 23s. 6d.; fine clean has sold at 24s. 6d., and now holders ask 25s. per cwt.

GUM ACACIA.—Rather neglected; the husiness passing being chiefly retail, but at fairly steady prices, the stocks of Arabic sorts being only moderate, and holders are firm.

OIL (CASTOR).—The *Diotator* has brought a considerable quantity, and good second *Calcutta* is  $2\frac{15}{52}d$ , to  $2\frac{1}{2}d$ , per lb. *French* oil is unchanged in value.

QUILLAIA.—Although stocks are good, holders are very firm indeed at 12l. 10s. per ton for good bark.

SPERMACETI.—Twenty-nine cases Chilian, just arrived, are held for 1s.  $3\frac{1}{9}d$ , per lb.

## LONDON DRUG STATISTICS.

THE following figures refer to the number of packages of drugs in stock at the London public warehouses on December 31, 1893 and 1892, and to the imports and deliveries iuto and from the same warehouses during the last three years:

	Sto	eks		Import	s	L	)eliveri	es
_	1893	1892	1893	1892	1891	1893	1892	1891
Aloes	6.226 3,256 7,489 923 1,897 772 1,133 42 4,883 581	5,803 801 5,297 433 1,369 261 937 1,568 42 2,727 553	4.046 3,462 17,377 2,760 1,956 20 4,164 2,750 46 12.167 2,313	2,652 277 16,576 1,675 1,119  4,532 3,122 28 8,429 2,822	901 1,436 85 3,188 2,042 6	3,623 1,007 15,170 2,270 1,413 276 4,328 3,173 46 10,799 2,279	2.195 1,294 4.441 2,526	2,083 2,039 85 3,180 2,044 6 9,931
Cinchona bark: S. Am { E. Ind., Ceylon, and Java	52 '23,193 105 14,491	56 22,958 142 15,739	67	71 12,826 264 33,200	21 11,678 529 38,092	105	387 16,359 370 39,473	563
Total	37,841	38,895	37,027	46,361	50,320	38,081	56,589	52 333
Cochineal	2,671 558 1,962 26 370 97 438 2,591	3,180 687 500 10 319 118 522 2,237	1.960 397 3,726 31 664 169 2,535 3,526	2,392 1,098 1,239 6 771 243 2,053 3,251	2,857 493 230 35 308 173 1,272 8,784	190 2,592	224	3,288 228 864 48 457 178 2,264 9,992
Gums: Ammoniacum Animi and Copal Acacia Asafetida Benzom Damar Galbanum Gamboge Guaiacum Kino Mastic Myrrh Olibanum Sandarach Tragacanth	\$5 10,005 13,827 183 3,048 3,635 15 200 192 4 22 305 2,701 948 1,836		684 3,653 5,367	23,756 278 2.655 3,828 1 459 274 10 3	46 12.966 25,929 38 3.464 4,670 43 221 371 33 40 575 7,228 1,416 5,513	22,451 585 2,702 5,247 23 314 196 13 28	215 14.062 28,947 714 3,577 4,510 6 337 206 23 21 470 8.734 1.270 7,043	45 15.417 24.994 348 3.356 6.992 37 216 245 59 27 637 7,412 1.185 7.260
Indigo, Beugal Madras Kurpah Manilla Fig4, &c.	1,231 686 3,177 2,326	1,931 435 2,451 1,109	4.346 1,103 9.882 4,835	9,557 541 4,700 1,899	9,606 776 4,665 1,069		11.291 837 3.972 1.261	8,557 1,336 5,607 847
Total	7,420	5,926	20,169	16,697	16,116	18.675	17,361	16,347
Spanish Ipecacuanha - Brazilian Colombian, &c. Jalap Nux Vomica Ilhubarb Safflower Sarsaparilla	1,476 676 123 151 559 929 109 412, 3,958	1	2,675 1,742 518 1,372 1,298 158 1,294 7,457	376 3,296 1,926	3,224 1,297 203 1,839 975 30 1,072 3,540	2,009 1,649 423 1,412 1,376 169 1,347 5,022	2,938 1.642 357 3.143 1.326 234 1,116 4,469	3,296 1,133 276 1,982 1,408 160 1,049 4,564
Shellac, Orange Garuet Button	3,860 3,376	3,864 3,426	9,123 8,546	8,065	5.446 10,933	9,327 8,596	9,892	34.653 7.953 9,829
Total				45,909				
Star-anise	613 46 836	239 68 325	712 40 1,507	472 89 881	425 131 402	1.165	275 47 1.134	430 140 1.010



## Memoranda for Correspondents.

In letters for publication correspondents are requested to express their views as concisely as possible.

Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.

The name and address of the writer should accompany all communications' with, if desire l, a distinctive nom-de-plume.

## The Sale of Drugs "Without Reserve."

SIR,—We notice in your issue of to day your report under the heading of "Orris root" that you say, "The market has fallen 13s. or 14s. per cwt." We are the purchasers, or sup-posed purchasers, of Lots Nos. 87-90, 13 bags orris-root, in which form the parcel referred to, at the supposed price of 70s. and 71s. per cwt.; but although the goods were marked "without reserve" the seller stipulated a few minutes before the sale that it should be subject to his confirmation. This morning we have a notice from the brokers informing us that the very lowest limit was 85s. per cwt, and that consequently the contract was cancelled. In order that a wrong impression should not go forth as to the value of this product we give the foregoing for your guidance and information, and at the same time take this opportunity to record our strong objection to goods being marked for sale "without reserve," unless such terms are strictly adhered to. Yours faithfully,

4 Jewry Street, E.C., Jan. 5. Baiss Bros. & Co.

[Our report of what occurred at the auctions is correct-It is, of course, altogether contrary to the rules which are supposed to guide the sales that when goods are printed for sale "without reserve" in the catalogues this condition should be revoked just before the moment when they are actually offered. It is a pity that Messrs. Baiss Brothers & Co., who evidently hold the same view, should not have publicly protested when the orris-root was put up at the auctions with this additional condition added.—ED. C. & D.]

## Crystallisation of Water.

SIR,—An incident illustrating the crystallisation of water under peculiar conditions came under my observation a few mornings since, and as the phenomena were somewhat remarkable I think a brief account of them may interest your

When about to perform my morning ablutions, I happened to observe that there were in the hand-basin a few crystals of ice, which, before pouring in the water, I stopped to examine because of their fine formation. On pouring the water from the ewer into the basin, it became opaque, like mucilage of starch, and almost at the same moment was converted into a mass of beautiful crystals. I have related this incident to many friends-scientific and otherwise-but none has ever had or heard of a similar experience. There is no doubt the crystallisation was caused by the few crystals already in the basin. Possibly some of your readers may be reminded by this of similar or more wonderful effects of the recent intense cold. Yours, &c.,

Finsbury Park, N.,

ALEXANDER GUNN.

January 10.

## Miscible Liquors.

SIR,—Re the cinchona mixture in your last week's issue, I think it would be of general interest to the trade to have your opinion as to the advisability of using miscible solutions in the place of B.P. fluid-extracts in cases where the latter are not, strictly speaking, soluble in water.

It would appear that if a dispenser may use his own discretion in the patter than a specific product of the patter of the patter.

cretion in the matter, then one of the principal functions of the B.P. (the standardising of drugs, and thereby enabling

patients to obtain their medicines similarly dispensed in any town in the kingdom) is ignored. The alkaloidal value in each case may be the same, and the part climinated only inert colouring-matter; still, I think that a patient is justified in expecting his mixture to possess, not only the same medicinal action, but also to have the same physical characteristics wherever dispensed, and that is only to be attained by every pharmacist rigidly adhering to the B.P.

rigidly adhering to the S.T.
I remain, dear Sir, yours respectfully,
DISPENSER. (207,62.)

This is a subject which is worthy of discussion by dispensers.—ED.]

### LEGAL QUERIES.

Immediate Information on pharmacolegal matters is available in "Pharmacy and Poison Laws of the United Kingdom," Alpe's "Handy-book of Medicine-stamp Duty," and The Chemists' and Druggists' Diary.

205/5. E. P. C.—You may describe your mixture as "a refreshing snuff," but if you recommend it in any written or printed form in any way as a remedy for any complaint, or claim a proprietary right in it, you must put a medicine-stamp on each package. See Alpe's "Handy-book of Medi-cine-stamp Duty," 2s. 6d., from any of the wholesale houses.

205,14. Juvenis.—The question whether alum in bakingpowder is an offence under the Sale of Food and Drugs Act is now before the High Court, and judgment has been postponed.

201 71. Partner writes: "A partnership, entered into for a specified term, has just expired. Both partners wish to continue the business upon the old terms. Is any further agreement necessary? If so, what is required?"

If the partnership is to be continued there ought to be a short further deed, stating the term for which it is tobe continued and that it is continued subject to the same provisions as the old partnership, otherwise it would be a partnership at will. In the latter case the terms of the old partnership would apply so far as they were applicable to a partnership at will. See section 27 of Partnership Act, 1890. We should recommend a short supplemental deed, defining the terms upon which the partnership is continued.

203/63. Zemo.—It is not necessary that Excise officers should offer to divide any purchase into three parts, as in the Sale of Food and Drugs Act.

207/66. E. J. W.—You can make a corn-preparation how you like, and if it contain no scheduled poison it can be sold by anybody. It is at your option whether you patent the preparation; it is very unlikely that the patent would be enforceable. Whether you put a medicine-stamp on it depends on how you label and advertise it. To learn all about this you must get Alpe's "Handy-book of Medicine-stamp Duty" (2s. 6d.), from any wholesale house or from us.

## MISCELLANEOUS INQUIRIES.

The Editor replies to quevies of general Interest, in the order in which they are received. Replies are inserted according to the space available. Postat answers cannot be supplied.

Back numbers containing formulæ, educational or other specific information can be obtained from the Publisher.

205/10. Incholiffe.—A bare list of the six articles you sell most frequently is all we ask for. You can add as much essay about them as the postcard will hold if you like, but it will not make any difference to your chances in the competition.

198/60. Sparkle.—The specimen looks uncommonly like Daphne Mezereum.

197/32. Arsenic writes in regard to Powder Sheep-dip:
—"I intend making an arsenical sheep-dip powder, and have analysed a well-known powder which has the following composition:—

				1	ger cent
Moisture	• •		• •		7.9
Arsenions suiphide			• •		17.0
Sulpharsenite of soda			• •	• •	12:3
Sulphur		• •	• •		62.8

Can you give any particulars of its manufacture? Would it be better with more sulpharsenite of soda? Would it be advisable to have the arsenic or arsenious acid instead of the sulphide." To the first of these questions we can only reply in the negative We are not told the name of the powder, and if we did know the maker's process through personal knowledge we could not in common fairness publish it. We presume that the sulpharsenite of soda which our correspondent refers to is sodium thio-arsenite, NaAsS<sub>2</sub>. The property which this salt appears to possess in sheep-dips is that of decomposing when brought into contact with water, sulphur and sulphuretted hydrogen with sodium arsenite being amongst the products, but there is still much dubiety regarding the properties of the thio-arsenites. But whatever they may be it is known that an arsenite and sulphur are amongst the ultimate products, and the specific action of these in the pseudo-nascent state must be eonsiderable. To make the thio-arsenite orpiment and sodium carbonate should be fused together in the proportion of As<sub>2</sub>S<sub>3</sub> to 2Na<sub>2</sub>CO<sub>3</sub>, but it is obvious from the analysis that a large excess of the former has been used. We do not think that arsenious acid by itself is so useful or effective as sodium thio-arsenite. Our correspondent (a manufacturing chemist) asks if he can sell such sheep-dip direct to the consumer, he not being a ehemist and druggist. He eannot. The fact, which he mentions, that ironmongers in Scotland sell arsenical dip does not alter the case. They are acting illegally, and should be stopped.

194/29. Tannin.—An aniline black is meant.

187 60. J. W. W.—We put a question, for we have not the information.

168/23. Gossypium —We shall inquire about the German herb which you mention. The following Limes and Glycerine does not separate:—

Curd soap		••		••	• •	3 iss.
Water				••		Oj.
Dissolve by heat, and mi	ix wi	th the	follow	ing:—		
Nut oil						Oiss.
Oil of lemon						3iss.
Oil of bergamo	t			• •		Siss.

191/30. A. P.—(1) Your proposition in regard to the frozen water-pipe also occurred to us; but we had it from a chemist who used the plan on the suggestion of his wife. Could we poke fun out of that? (2) The simplest Gipsystain for the skin is weak tincture of iodine, but the theatrical face-paint is best. See the Buyers' Guide in the DIARY as to the agents.

194/51. II. II. II. II. II. W.—The recipe given in Beasley for Marking-ink cannot be Redwood's. We have printed the formula frequently, and ean send you a number containing it if you apply in the ordinary way. The whole secret is in getting rid of the nitric acid. That we have proved.

194 61. E. B. D.'s questions are interesting, but he sends neither name nor address.

191/66. Inquirer.—Violet and similar lozenges are perfumed with the concrete essential oils, which are exceedingly powerful and correspondingly expensive.

187/12. Belgium —(1) The Red Polishing-paste for metals is made according to the following formula:—

The powders are to be in as fine a state of division as possible. Mix them, add the parafilm oil, then make into a paste with equal parts of lard and crude vaseline, and perfume with oil of mirbane.

(2) We do not understand your second query.

189/12. Cupri Sulph.—See under "Ink" in the index.

215/36. X. Y.—Your battery, we presume, is a Leclanehé, this being the type most eommonly used with bells. During action this battery slowly gives off free ammonia, which is not injurious. Care should be taken not to place the battery in a very warm situation, as this tends to evaporate the solution, necessitating frequent addition of water. Also it should not be in a place which is alternately dry and damp, as this tends to "creeping" of the solution over the sides of the outer glass cell. For these reasons, a shelf near the eeiling and close to a scullery-door, through which steam will make its way on washing-days, is clearly not the place for the battery. It should be in a clean and dry situation where the temperature is fairly equable, and where it can easily be got at and inspected.

194/26. Menthol.—At present we do not know how the paper is made, but we shall endeavour to find out and let you know.

199/65. Tvilet.—Why not try heliotropin for your Face-powder? Quite new perfumes you have also in the concrete essential oils—violet, &c.—which are always nice.

200/29. W. P.—Cocaine for Dental Operations should only be given to adults in the manner described by us on December 30. Restrict its use in this way until you get experience. It is rare for accidents to happen, and when they do, stimulants, such as brandy and sal volatile, are all that is necessary. The patients become faint. Some dentists give their patients a dose of sal volatile before injecting the cocaine. You may give a ½-grain tabloid of eocaine hydrochloride to robust persons of 16 to 18. If you paint a drop of the solution all round the gum a minute before inserting the needle the prick will not be felt. Recently-boiled water is good enough for preparing the solution. After using the syringe clean it by washing in hot water to which a little carbolic acid has been added, then with spirit and water.

201/2. W. P.—(1) We should think the preparation resembles the lightning cleanser, the formula for which we have frequently published; but we put the inquiry for you.
(2) Ung. Resin. Acid. (M.R.I.Ph.):—

	•			Oz.				
Yellow resin		• •	 	4				
Yellow wax			 	20	(10 oz.	in	winter	.)•
Olive oil			 	20	(30 oz.	19	22	)
Venice turpent	lne		 	8				
Burgundy pite	lı		 	4				
Oxide of zine			 	4				
Solution of ear	bo <mark>tie</mark> r	icid	 	101				
							25 2 12	

Melt all the ingredients, except the last two, by a gentle heat. Rub the oxide and carbolic solution together, and add to the resinous mixture.

The solution of carbolic acid is made as follows:-

				)
Carbolic acid		 	 	 ļ
Glycerine		 	 	 l
Water		 	 	 L
х.				

We are glad that you are so well pleased with the DIARY.

201/21. Vet.—Our "Veterinary Counter Practice" contains all that is necessary.

200/65. Veterinary.—(1) Brunswick black thinned with turpentine makes a good Black for Horses' hoofs. (2) See our issue of November 25, 1893, page 780, for Harness-blacking.

201 11. J. Dykes.—We do not reply to non-subscribers, except they are employed by subscribers.

201/22. Carbolic.—(1) Kieselguhr is infusorial earth. Messrs. John Moss & Co. supply it in large or small quantities. (2) We reply to a similar query hy another correspondent.

198,30. W. & Co.—We have some more articles in type which we shall publish, and prohably bring the whole together as a book.

## INFORMATION SUPPLIED.

For this section we are always glad to receive from subscribers brief notes on practical subjects, recipes which have been found good in practice or which have required modification, and hints or fresh ideas on any pharmaceutical or trade matter.

189/18. By "Essence of Copethia" I should be inclined to think the so-called Carpathian or Riga balsam is intended. This drug partakes more of the nature of an essential oil than a halsam, hence would not be inaptly termed an "essence." It is said to be obtained by distilling the young shoots of the Pinus Cembra or Siberian stone-pine. Its properties are of the usual terebinthinate character, and, like common turpentine, it would act as a rubefacient or counteriritant, and so be of use in some cases of neuralgia. Cooley says, "The bottoms of oil of juniper are generally sold for it in the shops," but one of the firms advertising in the C. & D. quotes the genuine article at 8s. per lh.

C. S. ASHTON.

198/13 and 187/60 will probably meet with the colours and varnishes they require by putting themselves in communication with either of the three or four oil and colour merchants, whose advertisements appear in the DIARY for this year.

C. S. ASHTON.

193/28. Equinus will have no difficulty in procuring henna-leaves (Lansonia inermis). They are stocked by several of the drug-houses who advertise in the C. § D. But a much more satisfactory result would, I think, be obtained by using the equally harmless bismuth hair-dye, recommended in Martindale's "Extra Pharmacopæia," fol. 81, seventh edition. This gives a deep chestnut brown to white hair, after a few applications, and is to be preferred to the copper and pyrogallic dye quoted in C. § D., vol. xxxix., page 797. The weak point with vegetable dyes is their want of permanency. C. S. Ashton.

31/93. Tyson's Drink-cure.—We have received the names of two agents from Mr. J. S. Ward, Lisburn, whom we thank.-

198 13. Ochres.—Replies have been received from Inchlifte and J. L. Lyon & Co.

199/8. Haigh's Tonic.—We are obliged to Mr. J. Tyrie Turner, M.P.S.I., Dublin, for a reply to this inquiry.

## INFORMATION WANTED.

The Editor invites, on behalf of inquiring subscribers, post-card replies to the following:—

204/4. Address of a continental maker of decorated tin boxes.

201/2. What is the composition of "The American washing-preparation"?

200/25. Makers of stoneware furniture Cream-bottles, 1d. Castor-oil Bottles, and 1d. and 2d. Ointment-tins.

## Mext Week.

Meetings, &c., to be held, and business to be transacted thereat. Suitable notices will be inserted in this section if received by the Editor on or before Wednesday.

TUESDAY, January 16.—Royal Institution of Great Britain, at 3 p.m. Professor Charles Stewart on "Locomotion and Fixation in Plants and Animals."

WEDNESDAY, January 17. Brighton Senior Chemists' Ball. Metropole, Notel at 9 P.M.

WEDNESDAY, January 17.—Society of Arts, at 8 P.M. "White Lead Substitutes," by A. Laurie, M.A.

WEDNESDAY, January 17.—Chemists' Twenty-eighth Annual Ball. Portman Rooms, Baker Street, W., at 9 P.M. Hon. Sec., Mr. A. J. Phillips, 156 Cromwell Road, S.W.

WEDNESDAY, January 17.—Manchester Chemists' Ball, Hulme Town Hall, at 8 p.m. Hon. Sec., Mr. A. Blackburn, 7 Exchange Street; M.C., Mr. T. Bage Blyton.

WEDNESDAY, January 17.—Edinburgh Chemists', Assistants', and Apprentices' Association, 36 York Place, at 9.15 P.M.

WEDNESDAY, January 17.—Royal Microscopical Society, 20 Hanover Square, W., at 8 p.m. Annual meeting. Address by the President, Mr. A. D. Michael, F.L.S.

THURSDAY, January 18.—Birmingham Chemists' Ball. Assembly Rooms, Edgbaston, at 8 p.m. Hon. Sec., Mr. T. W. Chapman, 199 Bristol Street; M.C., Mr. E. J. Reynolds.

THURSDAY, January 18.—Chemist's Assistants' Association, 103 Great Russell Street, W.C., at 8.30 P.M. Mr. W. M. Holmes on "Sponges."

THURSDAY, January 18.—Glasgow and West of Scotland Pharmaceutical Association, 94 West Regent Street, at 9.15 p.m.

THURSDAY, January 18.—Chemical Society, at 8 p.m. "The Molecular Formulæ of Some Liquids as Determined by their Molecular Surface Energy" (I.), by Professor Ramsay, F.R.S., and Miss E. Aston, B.Se. "Contributions to Our Knowledge of the Aconite Alkaloids." VIII.—On "Picraconitine," by Professor Dunstan, F.R.S., and Mr. E. F. Harrison. IX.—"The Action of Heat on Aconitine," by Professor Dunstan, F.R.S., and Mr. F. H. Carr. X.—"Further Observations on the Conversion of Aconitine into Isaconitine," by Professor Dunstan, F.R.S., and Mr. F. H. Carr. "The Interaction of Benzylamine and Ethyl Chloracetate," by Drs. Mason and Winder.

THURSDAY, January 18.—Royal Institution of Great Britain, at 3 p.m. The Rev. Canon Ainger on "The Life and Genius of Swift."

THURSDAY, January 18.—Society of Arts, at 8 30 P.M. "The Petroleum Fields of India: their present condition and their probable future," by R. D. Oldham, A.R.S.M., Superintendent Geological Survey of India.

FRIDAY, January 19.—Royal Institution of Great Britain, at 9 P.M. Professor Dewar, F.R.S., ou "Scientific Uses of Liquid Air."

SATURDAY, January 20.—Royal Institution of Great Britain, at 3 P.M. Professor W. H. Cummings on "English Schools of Musical Composition." (With musical illustrations.)

The Western Chemists' Association (of Landon).—In consequence of the Chemists' Ball being held on January 17, the usual monthly meeting of the above Association is postponed to Wednesday, January 24, at the Westbourne Restaurant, 1 Craven Road, W., at 9 P.M., when a discussion will take place on "Affiliation of Pharmaceutical Associations."

London Chamber of Commerce, Botolph House, Eastcheap, E.C.—A pecial meeting of the chemical-trade section will be held to-day (Friday), at 2.15 p.m., to discuss the new rules for chemical-works issued by the Home Office.

Jan. 13, 1894

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VITH VITRIFIED (burnt in) LABELS

(Black Letters on a ground of Pink or White Enamel).

Labels indestructible and of elegant appearance, forming an even surface with the glass or porcelain. The Jars of best porcelain, thoroughly greaseproof. The Bottles hand-made and of superior quality. Both are unsurpassed by anything in the market in every respect. Also a CHEAPER sort of Bottles and Jars, with labels equally indestructible, but very plain, especially suitable for Dispensaries, &c. Intending Buyers are requested to inspect Samples at

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## WARNING AGAINST **IMITATIONS** PIRATICAL "VINOLIA" SOAP.

Who coined the word "SUPERFATTED?" QUERY.

WE DID, and we never heard of its appearing in any lexicon, ANSWER. scientific, or other publications whatever, anywhere, until after we had popularised it and created a demand for a "superfatted" soap ("Vinolia").

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We will not reflect on your intelligence so early in the New ANSWER. Year by saying anything about it. Honourable men know why,

Are the Trade going to stand by the piratical imitations or by the QUERY. original, which is "Vinolia?"

"Vinolia," of course. ANSWER.

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## ESTABLISHED 1816.

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Concentrated Infusions. Spirit. Ammon. Aromat. Concentrated Waters. Solid Extracts.

SYRUP. HYPOPHOS. CO. (R. C. & CO.).

Guaranteed to contain 5½ grs. of Hypophosphites—namely, Calcium, 2 grs.; Potassium and Sodium, 1 gr. each; Ferrous,  $\frac{3}{4}$  gr.; Manganese and Quinine,  $\frac{1}{4}$  gr. each; being stronger in Hypophosphites than any Syr. Hypophosph. Co. we have ever met with.

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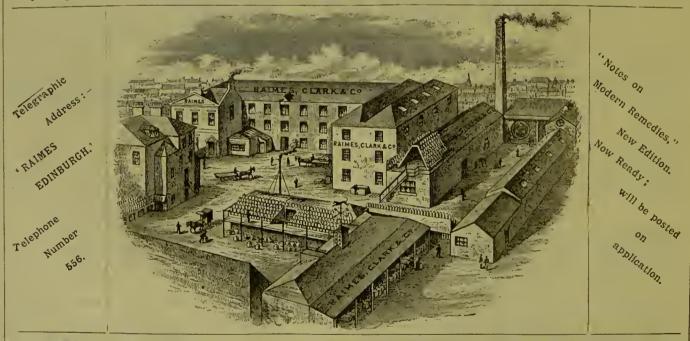
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A definite Chemical Compound, answering B.P. and all Official Tests.

Has obtained the confidence of the most eminent Surgeons, has been used successfully in the Edinburgh Royal Infirmary, in the Edinburgh Road Maternity and Simpson Memorial Hospital, and in the most important Institutions both at home and abroad.

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PRICES SPECIAL

FROM OUR OWN GROWTH OF

## PANSIES.

We believe that our Syrup and Liquor are this season unequalled for fine colour and keeping properties.

SAMPLES AND PRICES ON APPLICATION.

Large buyers will find it worth their while communicating with us.

M BLEASDALE & CO. YORK.

# NOT OURS, EVIDENTLY!

We recently received a copy of what purported to be the "record" of the results of experiments undertaken in the interests of———— (but that's immaterial for the present) upon certain Coated Pills. Suffice it to say that the said results prove that what we have constantly maintained is an absolute fact—viz., that there are placed upon the market at more or less tempting prices many kinds of pills of inferior make which are worse than useless by being positively harmful to those who take them.

We have it distinctly stated that some of the Pills experimented upon remained as follows:—

- "Quite hard after twenty-four hours,"
- "Undissolved after two days."
- "Sticky lump after twenty-four hours."
- "A sticky lump after three days," &c., &c.

Why will Chemists continue to purchase such vile and injurious pellets when by dealing with us, who have a reputation at stake and a record of over twenty years' standing for making reliable Coated Pills, which will bear testing at any and all times, they are assured of a genuine article? We are glad of this opportunity of producing independent testimony of the truth of our constant assertions, and we invite our customers to apply their own tests to Pills of our manufacture, and they will then be convinced that the Pills experimented upon as above were

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are a medicine that safely and certainly builds up, strengthens, regulates and cures. Highly recommended by Sir Henry Halford, Bart., M.D., formerly President of the Royal College of Physicians, London, and obtained with ease of any Chemist or Drug Store throughout the world for 1s. 12d., 2s. 9d., or 4s. 6d.

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This remains the most popular and efficient Blood and Bone Tonic known to Medical science. The formula was published by the inventor, Professor Parrish, of Philadelphia, in his celebrated work on Pharmacy (p. 238, Ed. 1874), and LORIMER & CO. received the GOLD MEDAL for manufacturing it. It is a Syrup which can always be relied upon, and can be supplied in any quantity up to 5-ton lots.

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# SYRUP. FERRI PHOSPH. Co.

# **Chemical Food**

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In Bulk. Cwt. 36/-

 $\frac{1}{4}$ -lb.  $\frac{1}{2}$ -lb. 1-lb. Bottles.

2/8 4/6 6/9 doz.

30/- 46/- 66/- gross.



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A.—The Syrup is put up in splendid style in round-corner flats, with plain black-on-yellow labels. Each bottle in a carton, 9d. per dozen extra.

# Pure Cod Liver Oil

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A highly superior Oil, said by an experienced Pharmacist to be "like new milk." In ½-gall. bottles, at 5/9 per gall.; 8-oz. bottles, 8/6 per doz.; 16-oz., 15/6 per doz. The above Oil is specially selected. An Oil as fine as any other in the market is also offered. It is put up in oval, round, or flat bottles, with a large selection of artistic labels available for buyer's name. Prices are as follows:—

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TO

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					RE	TA		PRIC	ES.				
1/-		***	•••	•••	•••	•••		•••		•••	***	<b>NEW SIZ</b>	E.
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3/6	•••	•••	•••	•••	•••	•••	0.000	•••	• • •	•••	•••	"	4,6
			В	EST	- W	HO	LES	ALE	Pi	RICE	S.		
1,- F	Bottle	s	•••				•••	•••	10/-	doz.,	not less	than 12	doz.
2/-	,,,										,,	6	,,
3:6	,,	•••		•••	•••	• • •	•••	•••	36 -	79	,,	6	,,
					NE	r CAS	IIII H	TH OR	DER				

Smaller quantities from the usual houses. Each Bottle will be in a Carton of same colour as present Paper Wrapper. Any stock of the old 2/6 or 4/6 sizes will be exchanged, and the difference in price of 1/- and 2/- per dozen allowed for.

To Manufacturers of Pharmaceutical Preparations, Druggists' Sundries, &c.

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# HORSFORD'S PHOSPHATE

THE STANDARD AMERICAN TONIC.

Prepared according to the directions of Prof. Horsford, by the Rumford Chemical Works, Providence, R.I., U.S.A.

FORMULA.—Analysis shows that each fluid drachm contains  $5\frac{1}{2}$  grs. free phosphoric acid  $(P_2O_5)$  and nearly 4 grs. phosphate of lime, potash, magnesia and iron. (See U.S. Dispensatory, 15th Edition.)

The therapeutical value of phosphorus is universally acknowledged by the medical profession in all countries. This substance, in the form of phosphoric acid, and generally combined with lime, iron, potash, and other bases, is present in the tissues and bones, and in some form this remarkable acid is a constituent of all the important organs and sceretions of the animal body.

Among the numerous forms of phosphorus in combination, Horsford's Acid Phosphate is offered as best adapted for use as a medicinal remedy,

Experience has proved that the Acid Phosphate is especially serviceable in Dyspepsia, Indigestion, Mental and Physical Exhaustion, Insomnla, Nervousness, &c., as a Drink in Fevers, and as a menstruum for the administration of such alkaloids as strychuina, morphina, quinina, and other organic bases which are usually exhibited in acid combination.

It acts as a nutriment to the cerebral and nervous systems, restoring to their normal condition secretory organs that have been deranged, giving vigour where there has been debility, and renewed strength where there has been exhaustion.

Horsford's Acid Phosphate has been in use by the medical fraternity for several years, with the most satisfactory results.

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Our Representative at Chicago Exhibition reports as the result of an interview with the President of the Executive Committee on Awards:-

"The Award to the Liquor Carnis Co. at this Exhibition is tantamount to the 'Highest Award' given at previous "International Exhibitions where the system of three or more Orders of Merit has been in vogue; here the Award is made "for Highest Merit only, neither a second nor a lower degree being recognised.

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\* The Exhibits consisted of Caffyu's Liquor Carnis, Malto-Carnis, Jelly Carnis, and Carnis Suppositories; also "Virol," the new substitute for Cod-Liver Oil.

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Manufacturers of Granular Effervescent Preparations. We shall be glad to give specially favourable quotations, and to send samples of our superior Nos. 1, 2, and 3 qualities of CITRATE OF MAGNESIA.

Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot. Otto de Rose, and all



Essential Oils: Valentia Saffron : Vanillas : Fruit Essences : Carmine, Aniline Dyes; Bees' Wax, &c., &c.

MANUFACTURERS of Very Superior Flexible Gelatine Capsules of Balsam Copaiba, Cascara Sagrada, Castor Oil, Cod-liver Oil, Santal Oil, &c Samples and Lowest Quotations per 1,000, or in Bexes for Retail, will be sent on application from either the Wholesale or Retail Trade.

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#### SCHACHT'S LIQUOR BISMUTHI.

Absolutely pure. The original preparation, invented and introduced to medicine by Mr. Schaeht in 1855. Its distinct superiority is universally admitted. In 1 lb., 1 lb., 2 lb., and 5 lb. bottles. Dose: 1 drachm dilnted. When ordering, please to specify "SOHACHT'S."

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Contains pure Bismuth and Pepsina Liquida in combination with sedatives. A formula most serviceable in the treatment of gastric pain. In 4 oz., ½ lb., and 1 lb. bottles.

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A standard preparation, of definite alkaloidal strength, containing the entire medicinal properties of the finest Cinchona Bark. It is, in fact, Bark minus the woody fibre, and its efficiency has been proved by careful medical inquiry. Dose: Ten to sixty drops.

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Finld Pepsine of extraordinary activity—tasteless, odourless, attractive to patients, and reasonable in price. Every teaspoonful when tested by the official B.P. process is guaranteed to effect the solution of 1,000 grains of albumen. Peptie power is the only test of value. Most of the fætid and repulsive dry Pepsines have proved worthless. In 4 oz. bottles, 2s. Sd. each; and larger sizes, for dispensing, at a cheaper rate.

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Each drachm contains in a concentrated form, besides the fluid Pepsine a full dose of Schaeht's Liquor Bismuthi. Dose: One draehm. In \ 10. and 1 lb. bottles.

N.B.—Peps. Liq. c. Bismutho Co. contains, in addition, one grain solubis Euonymin in each drachm.

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Each drachm contains one grain of soluble Enonymin. One drachm. For dispensing, ½ lb. and 1 lb. bottles. Doss

#### SCHACHT'S LIQ. PODOPHYLLI C. BISMUTHO.

A perfect solution of Podophyllin, containing & grain in each drachm.

#### SCHACHT'S LIQUOR CASCARÆ DULCIS.

A pleasant and active form of Cascara Sagrada. Dose: One to three teaspoonfuls diluted. In 4 oz.,  $\frac{1}{2}$  lb., and 1 lb. bottles.

#### SCHACHT'S INFALLIBLE RENNET.

An entirely new Essence, perfectly reliable, for the ecagulation of Milk and the production of Junkets and Curds and Whey. It is a prepara tion of the most wholesome nature, that contains no salt, and has no special taste, smell, or colonr. In large bottles at 1s. of any Chemists. This Essence keeps well ln any climate.

The above Preparations can be procured from Messrs. Barclay & Sons, W. Edwards & Son, and the Wholesale Druggists: or direct by post from

# GILES, SCHACHT & CO., Clifton, Bristol.

# C. F. BOEHRINGER & SOEHNE,

WALDHOF, near MANNHEIM,

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SULPHATE OF QUININE, and all other CINCHONA PREPARATIONS.

ACETANILID, CAFFEINE, COCAINE, CHLORALHYDRAT, CUMARIN, GALLIC ACID,

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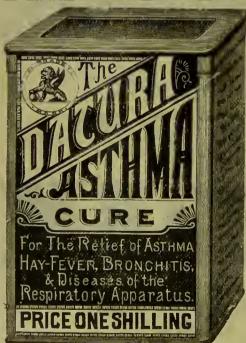
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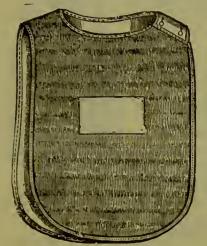
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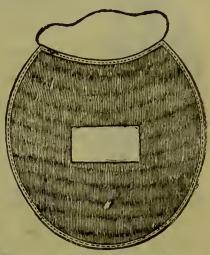
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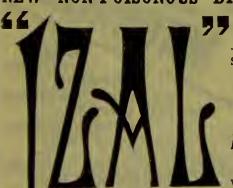
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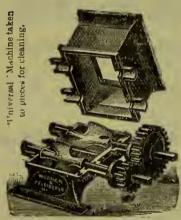
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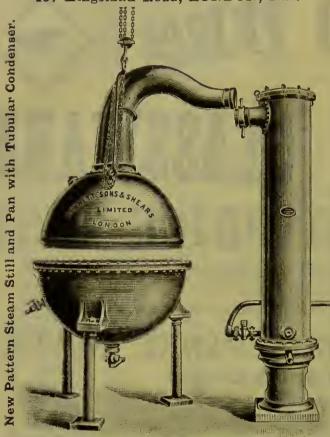
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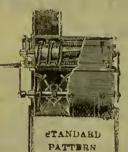
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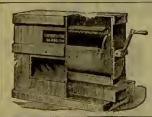
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Tentical Latticiferous vessels
Lenticel
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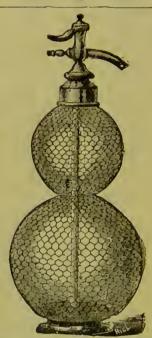
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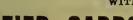
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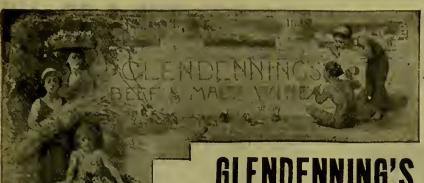
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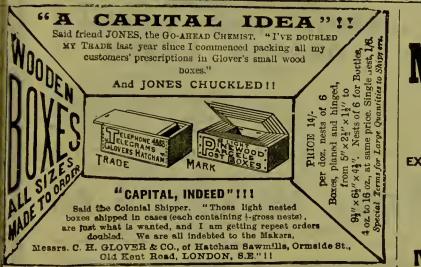
FINEST PREPARATION OF

### BEEF, MALT & WINE

We use Alto Douro Port Wine, Kepler Extract of Malt and Beef Jelly, containing 53.40 Albumen.

The most eminent of the Medical Profession constantly do us the honour of prescribing "Glendenning's" particularly. Chemists who stock our preparation find their sales increase.

Sole Proprietors, WM. GLENDENNING & SONS, Wine Importers, Newcastle-on-Tyne Distributing Agents:—Maw, Son, & Thompson, Aldersgate Street, London: Southall, Bros. & Barclay, Buli Street, Birmingham; Goodall, Backhouse & Co., Leeds.



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EXTRACT OF HERBS LEMONINE DANDELION CIDERINE SARSAPARILLA HOREHOUNDINE 33 HOPS 33

GINGER GINGER ALE

FOAMINE WINTER EXTRACT

#### Mason's Wine Essences.

GINGER RASPBERRY COWSLIP **STRAWBERRY ORANGE** BLACK CURRANT RED CURRANT LEMON LIME FRUIT JARGONELLE QUININE PINE APPLE

SARSAPARILLA LEMON SQUASH CHERRY PEPPERM PORT SHERRY **CLOVES ELDERBERRY** DAMSON RAISIN GOOSEBERRY
"WARMINE"

SOLE INVENTORS AND MANUFACTURERS-

#### NEWBALL & MASON,

Manufacturing Chemists,

HYSON CREEN WORKS, NOTTINCHAM.

# SUPPORT HOME INDUSTRIES.



# KENT'S RUSHES.

See pp. 145-148, Summer Issue; also Diary, 1894, pp. 339-342.

DELICIOUS

SWEETHEAT

#### PASCALL'S TALTEX

Contains 25% of Allen & Hanburys' Extract of Malt.

CONFECTION. NOVEL

Delicious Flavour. Brilliant and Attractive Appearance.

#### SELLS AT SIGHT.

Vide Dr. Tanner's Report, and The Chemist and Druggist, April 20th. 1/- Bottles, 9/- per dozen; 1-lb. Bottles, 18/- per dozen; and in 2-lb. and 4-lb. Bottles, 1/4 per lb. HANDBILLS POST FREE ON APPLICATION.

OF ALL WHOLESALE HOUSES OR OF THE MANUFACTURER,

LONDON, S.E. **BLACKFRIARS** JAS. PASCALL, ROAD,

Contains 25%

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The Best in the World. 1d. Packets; 6d., 1s., 2s., and 5s. Ting.

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One 6d. Tin is equal to 25 Eggs. In 1d. Packets; 6d., 1s.

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Delicious Blancmange in a Few Minutes. Boxes, 6d, and

Best Tonic yet Introduced. Bottles, 6d., 1s., and 2s. each.

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Makes the Best Gingor-Beer. Packets, 3d. and 6d.

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#### GOODALL'S LAVENDER

Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

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Make a Delicious and Nutritious Jelly. In 1-pint, 1-pint, and Quart Boxes, 3d., 6d., and 1s. each.

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For Milk, Cream, Butter, Sausages, &c., &c.

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Having received several shipments of Seville Oranges and Messina Lemons, we are prepared to supply the specially machine-cut Peels which have given such general satisfaction to the trade since their introduction. The Fresh Peels are cut free from pith in small sbreds (about 1 × 1/1 a'), a condition acknowledged to be the most favourable for the manufacture of Official Tiuctures and Infusions and of Soluble Essences.

The DRIED PEELS are cut as free from pith as possible, and every care taken in drying to preserve the colour and aroma.

Samples will be sent free on application.

Samples will be sent free on application.

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Essence of Beef Essence of Chicken Essence of Yeal Essence of Mutton

Beef Tea Jelly Concentrated Beef Tea Meat Lozenges

Meat Juice Malted Food for Infants Extract of Malt

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"O.K." Sauce

"O.K." Relish

"O.K." Curry Powder

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SILVER MEDAL.

| Per gross. | Extra quality | Per gross. | Extra quality | 26/- | 26/- | 28/- | 28/- | 26/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/- | 28/-

#### ROYAL CAFE SAUCE, a Rich Fruity and Exquisite Flavour.

Square Glass Stoppered Bottles, containing nearly 1-pint Imperial, 42/- per gross.

Sample Bottles at 7/- per gross.

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# TOWER TEA

HIGHEST AWARD, PARIS, 1889.

Analysis by the "LANCET," December 20th, 1890 :-

"We have submitted to examination the Teas of the Great Tower Street Tea Company (Limited). They all yield liquors which are generous to the taste, and of full strength and vigour. The results of our analysis indicate the purity and genuineness of the samples." RÉPUBLIQUE FRANÇAISE AB 5

PRIZE MEDAL, PARIS, 1889.

REBISTERED FRADE MARK.

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# THE GREAT TOWER STREET TEA CO., LIMITED

5 JEWRY STREET, LONDON, E.C.



# EXCEPTIONAL VALUE.



# ORANGE AND QUININE WINE, B.P.

In 26-oz. Bottles, 10/- per doz.

Prepared with HOWARDS' Sulphate of Quinine.

The Chemist and Druggist says:—"Messrs. Stephen Smith & Co., of Bow, E., are putting on the market an orange-quinine wine in wine-quart bottles. It is made according to the British Pharmacopæia, and they have sent us a sample, which we have examined critically. The orange-wine from which the preparation is made is of a pale-brown colour, good orange odour, and contains 7 per cent. of soluble matter other than quinine. This is mainly sugar. Its alcoholic strength we find to be equal to 25 per cent. proof spirit, or 11.8 per cent. by weight of alcohol, so that it is of the higher standard recognised by the Pharmacopæia. The alkaloidal value of the wine is also satisfactory. Three ounces of it yielded 2.3 grains of ether-soluble alkaloid, equal to 2.7 grains of sulphate of quinine, and allowing for experimental loss and the usual cinchonidine content (not extractable by ether) it will be seen that the wine has obtained not only the pharmacopæial quantum, but that it has lost little of it by tannic precipitation."

HIGH CLASS SHERRY, B.P., for Pharmaceutical purposes and Drinking, 6/6 per gall., 16/- per doz. EXTRA PALIDO SHERRY, delicate Dry Wine, 7/3 per gall., 18/- per doz.

ORANGE WINE, GINGER WINE, S.V.R. B.P., S.V.R. for Perfumery.

HALL'S COCA WINE, from all the Wnolesale Houses.

SAMPLES OF ANY OF THE ABOVE FREE.

STEPHEN SMITH & CO., BOW, LONDON, E.

# DRUGGISTS' CONFECTIONERY.

MESSRS.

# ROBERT GIBSON & SONS,

CARLTON WORKS, MANCHESTER,

And No. 1 GLASSHOUSE YARD, ALDERSGATE ST., LONDON,

Have now completed their EXTENSIVE ALTERATIONS, New Machinery and the most modern Appliances making their works the most complete of the kind in the Kingdom.

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SUPERIOR

#### BOILED

### SUGARS

Have gained a high reputation everywhere. FOR EXPORT TRADE. They are put up in 1-lb., 2-lb., and δ-lb. Bottles. Packed in Casks or in 1-doz. Cases as required, and delivered F.O.B. at any Port in England. These Sweets are absolutely pure. We specially recommend

Lime Fruit Tablets, Everton Toffy, Mixed Fruit Drops, Cough Drops, Raspberry Drops, Lemon Tablets.

#### COMPRESSED PI

PELLETS.

ALL KINDS IN ANY QUANTITIES.

### CHLORATE OF POTASH PELLETS

IN 1-CWT, ORIGINAL BARRELS. BARRELS FREE,

# HIGH-CLASS LOZENGES

OF EVERY DESCRIPTION.

THROAT HOSPITAL LOZENGES, COUGH LOZENGES, VOICE LOZENGES, TOP-NOTE PRODUCERS, &c., &c.

Indents from abroad, marked "GIBSON," may be sent to any Wholesale Drug or Shipping

House in the Kingdom. [2]

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Mack's Starch

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Quelch, H. C.
Ricksecker, Theo.
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Woods, W. (Areca Nut)

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Browning A. J. Stevans, P. A. DISINFECTANTS

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Tyrer, T. & Co.

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Heald, A. J.
Spratt's Patent, Lim.

DRUGS

Graf, F. | Hoof, R.
Richardson, J., & Co., Lim.
(Grinders)

RUGCISTS'SUM.
Ayrton & Saunders
Balley, M., & Co.
Rarelay & Sons, Lim.
Belden, E. & W.
Chamist' Association, Lim.
Currie, W., & Co.
Evans, Lescher & Wabh
Evans, Sons & Co. (Savare)
Rawsett, T.
Fordham, W. B., & Sons, Lim.
Fordham, W. B., & Sons, Lim.
Hostin & Co., Lim.
Heath Bros,
Hookin, Wilson & Co.
Idris & Co., Lim.
Maw, S., Son & Thompson
May, Roberts & Co.
Mullerson, H.
Nawbery, F., & Sone
Quelch, H. C.
Sanger & Sons | Behntzs & Co.
Tidman & Son | Toggod, W.
Tunhridge & Wright
Tysr Rubber Co.
Wood, Vincent | Young, J.

DRYSALTERIES Browning, J. H., & Co. Burton, W., & Sons

DYES, &c.
Ayrtou & Saundars
Burton, W., & Sons
Orawshaw & Go.
Wells & Richardson Co.

BAU DE COLOGNE Blondeau & Co. Farina, J. M. Hockin, Wilson & Co. (Farina) Martin, Maria (Nun) Mosnich, Oscar, & Co. Muhlens. F.

ELECTRICAPPAR. Darton, F., & Co. Gant & Co.

EMBROCATION

ENEMAS Barciays, Llm, Evans, Sons & Co. Sanger & Son Wood, Vincent ENGRAVERS

Corean, J. R. ESSENCES ROSENCES

Roshm, Fredk.

Roulton, J., & Co. (Llm.)

Bratby & Hinchliffe, Lim.

Burgoyne, Burbidges & Co.

Rush. W. J. & Co.

Carter, H. W., & Co.

Fistonsr, Fletensræstevenson

Goodall, Backnouse & Co.

Idris & Co., Lim.

May & Baker, Lim.

Meadoworot & Son

Newbisil & Mason

Rylands, Dan, Lim.

Stevenson & Howell

Tyrer, P. (Anchovies)

Tyrer, T., & Co.

SSENTIAL OILS

Woollsy, Sons & Co.

ESSENTIAL OILS

Allen, Stafford, & Sens
Barrett, A. A.
Boehm, Fredk,
Brummerstaedt & Luders
Bush, W. J., & Co.
Olay, Dod & Co.
Olay, Dod & Co.
Oailer, Walker & Co,
Dodge & Olcott
Evans, Sons & Co.
Hodgkinsons, Treacher
Clarks
Lambert, S., & Co.
May & Baker, Lim.
Meadoworott & Sons
Elchards & Bert
Rylands, Dan, Lim.
Sosio & Andrioll
Stevenson & Howell
Symes & Co.
Treatt, R. C.
Warrick Broe.
Witrofsky, E.
Wright, Layman & Umney

Wright, Layman & Umney
ET HER
Duncan, Flookhart & Co.
Howards & Sons
May & Bakor, Lim.
Robbins, J., & Co.
Tyrer, T., & Co.
Whits, A., & Sons
Woolley, Sons & Co.
Wright, Layman & Umney

EUCALYPTUS Blekfords | Bosisto's |
Jownie B.f.P. Co.
Evans, Lescher & Wishh
Grimwads, Ridley & Co.
Langhland, Mackay & Baker
Vackay, Mackay & Co.
Tasmanian Eucalyptus Oil Co.
Woods & Co.

EXALGINE Kithn, R.

EXTRACT MEAT

Amour & Co.
Bovril, Lim
Brand & Co.
Idris & Co. (Viking Co.)
Liebig Co.
Mason, G., & Co., Lim,
Wyeth, J., & Brothsr
EXTRCTS, FLUUD
Allen & Hanhurys
Burgoyns, Burbidges & Co.
Frans, Sons & Co.
Fletcher, Fletcher's Stevenson
Hasron, Squirs & Francis
Hooper, B., & Co.
Lioyd T., Howard, & Co.
Moss & Co.
Potter & Clarks
Elchardson, J., & Co., Lim,
Wright, Layman & Uniter

Wright, Layman a Umus;
FEEDG BOTTLES
Burroughs, Wellcoms & Oo.
(Thermo Safe)
Ohemlast' Association, Lim.
Evans, Sons & Oo.
Hasrn, Wright & Oo.
Hookin. Wilson & Oo.
Kinser Bros.
Marriott, E., & Oo.
May, Roberts & Oo.
May, Roberts & Oo.
Surray Packing Go.
FILTERG PAPERS
H. O. Quelch

H. C. Quelch

FILTERS
Fordham, W.B., & Sons, Lim.
Mawson Pitter Co.
Silicated Carbon Piltor Co
FOOD (Infants' & Invalid's
Allen & Hanburys
Banger's Pood I arend & Co.
Chilmali, H. H.
Evans, Sons & Co.
Goodali, Backh. uss & Co.
Hoaron, Squire & Francis
Iulantina
King, F., & Co. (Lim.)
Lishig Co. | Lorimsr & Co.
Mason, G., & Co.
Mason, G., & Co.
Maslin'e Food | Nastlé, H.
Eldgs, Dr. | Tyrsr, P.
Viking Food Co.
Wysth, J., & Bro,
FORMULA
Brooks, T.

Brooks, T.

GINGER ALD

Mills, R. M., & Oo.

Ross & Sons (Lim.)

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GLYCERINE Blyton, Astley & Co. (Pastilles)
Boehm, F. | Fink & Co.
Fnsrst Bros.
Price's Candle Co., Lim.
Watson & Sons
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Bromley, C. Prout & Harsant (Blair's)

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GUM Fink & Co. (Arabic, &c.) Fink & Co. (Arabic, &c.)

HAIR PREP.

Anglo-American Drug Co.,
Chesebrough Co.
Edwards & Co.
Horn, O. E.
Ricksecker, Theo,
Truefitt, H. P., Lim.

HERB BEER BXTS

Newball & Mason Potter & Clarke Schmidt, Karl

HOMEOPATHIS Keene & Ashwell Leath & Ross Thompson & Capper Watson & Wates

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May, Moberts & Co.

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Fallows

Fletcher, Fletcher & Co.

Lorimer & Co. | Symes & Co.

Tyrer, T., & Co.

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Spirone, Co., The
Toogood, W.
INK [See MARKING INKS]
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INSECTICIDES
Booke, Tompsitt & Co.
Steiner & Co.
Steiner & Co.
Stavenson & Howell
RETCHUP
Tyrer, P.

Tyrer, P.

KOLA PREPRTH
Christy, T., & Co.

LARD
Ewen, J., & Sous
LIME JUICH
Evans, Sons & Co.
Lorimer & Co.
LINT

LINT Liverpool Lint Co. Maw, S., Sen & Thompson Newsome, C. Rohinson & Sons

LIQUORICE Dennis Dl Luggo & Co. "Solazzi"

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Blyton, Astlsy & Co.
Davidson & Gray
Gibson. B., & Rons (Manfrs.)
Gusst. T. & Co.
Hill & Son | Lorimer & Co.
Fascall. J.
Raimss & Co.
Blohardson, J., & Co., Lim.
Warriet Broa.
MACHINERY
Bennstt. Sons & Shears(Lim.)

Bsnnstt, Sons & Sbsars(Lim.)
Burroughs, Wellcome & Co.
Gardnsr, W.
Martin Psrls & Co.
Ohlson, A.
Pindar, J. W.
Wernsr & Pfisidsrer (Kneeding and Sifting)

MAGNESIA

MAGNESIA
Bush, W., Son & Co.,
Duncan, Fullsr & Co.
Evans, Sons & Co.
Hanry, T. & W. (Calcined)
Hill, A. S., & Sons
Washington Chemical Co
MALT EXTROT, & C.
Allen & Hanburys
Burroughs, Wellcoms & Co.
(Kspisr's)
Glendenning, W.
Hearon, Squire & Francis
Lorimer & Co.
Moss, J., & Co
Oppenheimer, Sons & Co., Lim.
Haimss & Co.,
Elchardson, John, & Co. (Leicestr), Lim.
Kobinson & Co.

MARKING INKS

MARKING INKS
Bond, John (Crystal Palace)
(Ink and Panells)

MEDICINE CHATS

MEDICINE CHSTS

Burroughs, Wsiicoms & Co.
Day, Son& Hewitt (Vsterinary)
Day & Sons (Veterinary)
Elchardson, J., & Co., Lim.

MENTHOL

Burroughs, Wellcome & Co.
Christy, T., & Co.
Evans, Sons & Co.
Hockin, Wilson & Co.
Miss Sons & Thompson
Shirley Bros. | Tyrsr, P.

MERCURIALS
Frarst Bros.

MERCURIALS
Fnsrs Bros.
Howards & Sons
May & Baker, Lim.
Tyrer, T., & Co.
METH. SPIRTS, & o.
METH. SPIRTS, & o.
Phillips, G., & Co.
Pmith, S., & Co.
Warren, A. & J. METHYLEN

MODING, J., & CO.
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Darton, F., & Co.
MILH.
Nestlé, H. (Condensed)
MORPHIA
Macfarlan, J. F., & Co.
Smith, Bertle, & Co.
Smith, T. & H., & Co.

Smith, T. & H., & CO.
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VARNISHES, &c.
Angle-American Varnish Co.
Browning, J. H., & Co.
Fox, W., & Sons
Pinchin, Johnson & Co.
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OINTMNT BASES
Burgess, E., jun.
Burroughs, Wellcome & Co.
(Lanoline)
Ohesebrough Co. (Vaseline)
Ohristy, T., & Co.
Lanoline
Lloyd, T. Howard, & Co.
Richardson, J., & Co. (Leicsster), Lim. (Anaspalins)
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Bertie-Smith & Co.
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Botwright & Grey
Darton, F., & Co.
OTTO OF ROSE
Fnerst Bros.

Fnerst Bros.
Warrick Bros.
Witrofsky, J. E.
OXIDE OF ZIMO
Hubhuck, T., A Son, Lim.
PAPAIN
Kuhn, B. (Dr. Finkler)

PAPAIN

Kuhn, B. (Dr. Finkler)

PAT. MEDCNS, &c.

Anglo-Amer. Drug Co., Lim,

Atkinson & Barker (Infant

Preserv)

Barclay & Sons, Lim,

Beecham, T. (Pills)

Bow's, Dr., Liniment

Bromley, C. (Gont and Rheu.)

Chemists' Association, Lim.

Clarke's Blood Mixture

Congrevs, G. F.

Edwards & Son

Evaus, Lescher & Webb

Fassett & Johnson

Fanning (Powders)

Goodall, Backhouse & Co.

Hollowsy (Pills and Oint.)

Hovenden & Sons

Lalor (Phosphodyne, &c.)

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Nawbery, F., & Sons

Pepper, John, & Co. (Lim.)

Fopular Remedies Mig. Co.

Roberts & Co. (Foreign)

Rooks, Dr., 'im.

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Young, J.

EPSIN, & C.

wheen, A. Bunter & Nervine)
Young, J.
PEPSIN, &c.
Armour & Co.
Burroughs, Wellcome & Co.
Chassaing & Co.
Fistcher, Fistcher&Stevenson
Kihn, B. | Lorimer & Co.
Nawbery, F. & Sons (Ingiuvin)
Stern, C. & G.
Warner & Co. (Ingiuvin)

PEPPERMINT OIL Busb, W. J., & Co. Stevenson & Howsh

Busb, W. J., & Go.
Stevenson & Howsil

PERFUMERY,
FANCY SOAPS

Barclay & Sons, Lim.
Blassdale & Co.
Blooks, T. (Solid Perfume)
Bryton, Astiey & Oc.
Breddenbach & Co.
Brooks, T. (Solid Perfume)
Brummerstaedt & Lidars
Burroughs, Wisloome & Co.
Cheobston, T. (Solid Perfume)
Burroughs, Wisloome & Co.
Crown Perfumery Co.
Evans, Sons & Co.
Evans, Sons & Co.
Evans, Sons & Co.
Evans, J., & Sons
Parina, J. M.
Greensill & Sons
Hovenden & Sons
Lanolins, F.
Nawbery, F., & Sons(Berdoe)
Pears', A & F., Lim.
Potter & Clarks
Price's Patent Candle Co.
Bloksecker, Theo
Sandoid & Co.
Sozio & Andrioli
Tidman & Son | Treatt, B. C.
Truefitt, H. P., Lim.
Warrick Brothers
West, T. (Okell's Mons)
Woolley, Sons & Co. (Powder)
Wright, Layman & Umney

PEROX. OF HYPE.
Burton, W., & Sons
May & Baker, Lim.
Robbins & Oo.

PETROLEUM Allen & Hanhurys
Barclay & Sons, Lim.
Das Oil Co., Lim.
Fuerat Bros. (Jelly)
Hatrlek & Co., Lim. (Lucilline)
Snowdon, Sous & Co.

Snowdon, Sous & Co.

PHARM. PREPS.
Allen & Hanburys
Armour & Co.
Baiss Bros.
Barron, Harreys & Co.
Beber, J. D.! Beebm, Fredk,
Boshringer, C. F., & Sohns
Boulton, J., & Co., Lim.
Bryco & Enmpti
Burgoyne, Burbidgss & Co.
Burroughs, Willcome & Co.
Chaesaing & Co.
Duncan, Flockhart & Co.
Fetcher, Fletcher & Co.
Glies, Schacht & Co.
Fetcher, Fletcher & Fransis
Hewlett & Son
Howards & Sons
Howards & Sons
Jeyes' Sanitary Compounds Co.
Lambert Pharmacal Co.
May & Baker, Lim.
Moss, J., & Co.
Potter & Cliark
Richardson, John, & Co. (LeiBoberts & Co.
Coster), Lim.
Emith, T. & H., & Co.
Symes & Co.
Tyrer, T., & Co.
White, Alfred, & Sons
Woolley, Sons & Co.
Wride Bros.
Wyeth, Jno., & Bro.
Zimmermann, A. & M
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Pindar, J. W.
Toogood, W. (Coater)
Werner & Pfleidersr

Toogood, W. (Coater)
Werner & Pfleidersr

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Allen & Hanburys
Anderston Apothecaries' Hall
Beecham, Thomas
Blyton, Astlay & Co.
Bromley, C. (Gout & Rheu.)
Burges, B., Jun.
Clay, Dod & Co.
Cox, Arthur H., & Co. (tastles)
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Eade's Gout Fills
Evans, Sons & Co.
Harrolins Pill Co.
Hearon, Squire & Francis
Hill, A. S., & Son
Holloway's
Lloyd, T. Howard, & Co.
Lorimer & Co.
McKesson & Robbins
Nawbery, F., & Sons
Fotter & Sacker
Richardson, J., & Co., Lim.
Wand, S. (Fearl Coated)
Warner, W. E., & Co. (Coated)
Wysth J., & Bro.

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POLISHING Bradley & Bourds4, Albarum Chancellor & Co. Fordham, W. B., & Sont, Lim. Oakey, John, & Sont

PORCELAIN GDS
Toogood (E.c. Pots, regist.)
POULTRY FOOD

Spratt's Patent, Lim.

PERM TEM 6

Oorsan, J. R. (Obset)
Ford, Shapland & Go.

Bilverlock, H.
Taylor Small

PUMILINE Bookinger, O. S. & M.
Bookinger, O. F., & Sohne
Howarde & Sons
Simmermann, A. & M.
RECIPES

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RENNET
Duncan, Flookhar; & Co.
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Smith T. & H., & Co.
SALICYLIC ACID
Burgoyne, Burbidges & Co.
Fuerst Bros. | Kahn, B.
Zimmermann, A. & M.

SAUCES, PICKLES
Goodall, Backhouse & Co.
Lorimer & Co.
Mason, G., & Co., Lim.
Tyrer. P.

Tyrer. P.
SCIENTIFIC
INSTRUMENTS
Darton & Co.
Orme & Co.
| Doss & Co.
SHAVING

Hovenden & Bona (Buxesis) Lloyd, Mrs. A. B. (Buxesis)

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City School of Chemistry and
Pharmacy, Lim.
Davis, Fredk.
Liver pool School of Fharmacy
London Homeopathie and
Medical School
Manchester Col. of Pharmacy
Northern School of Pharmacy
Westmineter Collegs
SEED S

SEEDS Potter & Clarke

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Bratby & Hinchiffe, Lim.
Evans, Sons & Co.
Geraut, E., & Co.
May, Boberts & Co.

SHEEP DIP Jeyee'Sanitary Compounds Co. Tomlinson & Hayward

Seyee Santary Compounds Oc.
Tominson & Hayward

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Bowling & Govier
Bygrave, J. & W.

Evans, Sons & Oc.
Howlett, S.
Josepha, F.
Natall & Oc.
Poths, H., & Oc.

SOAP

Ayrton & Sannders
Barclay & Sons, Lim.
Blondeau et Cie. (Vinolia)
Bronnley, H., & Oc.
Calvert, F. C., & Oc.
Cook, E., & Oc.
Cook, E., & Oc.
Muhlens, F.
Pears, A. & F., Lim.
Price, Napoleon, & Oc., Lim.
Wright, Layman & Unney

SODIUM PEROXD.

SODIUM PEROND. Burton, W., & Sous

SPECTACLES
Botwright & Grey
Darton, F., & Co.

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Hickiesen, J.

STARCH Ohancellor & Co. (Mack's Oritchley (Gioss) (Double)

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Austin & Oo. (Sprinklers)
Barnett & Foster | Melin, C. STOVES

Olark, S., & Oo., Lim,

Byton, Astley & Oo.
Fletcher, Fletcher& Stevenson
Gloson, &., & Sons
SUGAR OF MILK
Boehm, Fredk.
SULFONAL
Burroughs, Wellcome & Oo
May & Baker, Lim.
SURGICAL
Ayton & Saunders

May & Baker, Lim.

SURGICAL

Ayrton & Saunders
Bailey, W. H., & Son
Barclay & Sons, Lim,
Oooking, J. T.
Eschmann Bros, & Walsh
Glover & Son
Haywood, J. H.
Krohne & Seeemann
Lee, J. Ellwood (Hatrick &
Co., Lim.)
Liverpool Patent Lint Oo.
Macfarlan, J. F., & Oo.
Maw, S. Son & Thompson
Powell & Barstow
Quelch, H. O.
Richardeon, John, & Oo. (Leicester), Lim.
Boblneon & Sons
Schntze, F., & Oo.
Tyer Rubber Oo.
Victoris Rubber Co.
Wood, Vincent
SYPHONS
Barnett & Foster
Bratby & Hinchliffs, Lim.

BYPHONS

Barnett & Foster
Brathy & Hinohliffs, Lim.
Fordham, W. B., & Sone, Lim.
Idrie & Oo., Lim.
Kliner Bros. | Melin, C.

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Fletcher, Flatcher&Stevenson
Idris & Oo., Lim. ((Liquors))

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Oorsan. J. B. 'Adverticing')
Richardson, J., & Oo., Lim.
(Compressed

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Gt. Tower St. Tea Co. Pearse & Meeking

TEETHING PADE Marriott, E., & Oo.

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Barciay & Sons, Lim.
Darton, F., & Co.
Byans, Sons & Co.
Hicks, J. J.
Newbery, F., & Sons
Perken, Son & Hayman

TINCTURES
Bieher, J. D.
Hvans, Sone & Co.
Hewlett, C. J., & Son

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Gitbert, J. A., & Oo.

TOBACCO
Singleton & Cole (Lim.)

TOILET FOILET
Allen & Hanburys (Ohrisma)
Burroughs, Welicome & Co.
Dec Oil Co., Lim. ((Lancline)
Horn, O. E.
Hovenden & Sons
Lorimer & Co.
Queich, H. O.
Ricksecker, Theo.
Truefitt, H. P., Lim.

TOOTH BRUSHES
Maw. S., Son & Thompson

TOOTH PASTE
Anglo-American Drug Co.,
Beecham, T.
Jewsbury & Brown
Sntton, C., & Co., (Block)
Wilson, A. (Bunter'e)
Woods, M. (Areca)
TRADE MARKS
Browne, T. B.

TRUSSES Bailey, W. H., & Son Evane, Sons & Co. Haywood, J. H. | Wood, V.

URETHANE
Howards & Sons
Vaccine Association (Lymph)

VACCINATION Vaccine Association (Lymph)

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TRNSFR AGNTS
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Berdos & Oo. | Brett, F. J.
Orocker, G. B., & Co.
Orridge & Oo.
Tomlinson, Thos., & Son

VASELINE

VETERINARY Bird & Storey | Day & See
Day, Son & Hewitt
Elliman, Sons & Co.
James, W. H. (Blisters)
Jeyes'SanitaryCompointsCo
Lloyd, T. Howard, & Co.
Lorimer & Co.
Bookledge, F. E.
Spratt's (Dogs)
Walkers, Troke & Co.
VINOLIA (Superftt'd)
Blondeau & Cie.

VINOLIA (Superftt'd)
Blondeau & Cie.

WHOLSL & MEPRT
DRUGGISTS
Allen & Hanburys
Balsa Bros.
Barron, Harveys & Co.
Bertie-Smith & Co
Bursoyne, Burbidges & Co.
Brash, W. J., & Co.
Clay, Dod & Co.
Demarchi Parodi & Co.
Evans, Sons & Co.
Evans, Sons & Co.
Evans, Sons & Co.
Evans, Lescher & Webb
Fassett & Johnson
Ferris & Co.
For, W., & Sons | Graf, F.
Goodall, Backhonse & Co.
Harker, Stagg & Morgan
Hearon, Squire & Francis
Hewistt & Son
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Kemp, Wm., & Son
Lloyd, T. Howard, & Co.
Lotthouse & Saltmer
MacGarlan, J. F., & Co.
Potter & Clarke
Richardson, J., & Co., Lim.
Symes & Co.
Thompson & Capper
Walkere, Troke & Co.
Warren, A. & J.
Willows, Francis & Butler
Woclicy, Jas., Sons & Co.
Wright, Layman & Umney

VINTES, SPIRITS
Armbrecht, Nelson&Co. (Coee)

Wright, Laymen & Unney
WINES, SPIRITS
Armbrecht, Nelson&Oo. (Ooes,
Burrough, J.
Ooleman & Co., Lim.
Durrant & Co.
French Hygienic Scor. (Coes)
Goodall, Backhonse & Co.
Hirst, Brooke & Hirst, Lim.
Idris & Oo., Lim.
Miller, A., & Oo. (Orange)
Robinson, B.
Smith, S., & Oo. (Orange)



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